DOCUMENT RESUME

ED 314 881 EC 222 020

TITLE	T.R.O.P.H.Y. Annotated Bibliography on Transition from School to Work.
INSTITUTION	Institute for Transition Research on Problems of Handicapped Youth.
SPONS AGENCY	Special Education Programs (ED/OSERS), Washington, DC.
PUB DATE	87
CONTRACT	300-85-0174
NOTE	194p.
PUB TYPE	Reference Materials - Bibliographies (131)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Adolescents; Adults; *Disabilities; *Education Work Relationship; High Schools; *Transitional Programs; Youth

ABSTRACT

This annotated bibliography on school-to-work transition for individuals with disabilities contains over 600 citations arranged alphabetically by author. The bibliography includes journal articles, books, book chapters, unpublished papers, reports, and transcripts of government hearings. The materials were produced between 1961 and 1987. (JDD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED314881

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Institute for Transition Research On Problems of Handicapped Youth

Contract Number 300-85-0174

RFP 85-107

U.S. Department of Education

T.R.O.P.H.Y.

ANNOTATED BILIOGRAPHY ON TRANSITION FROM SCHOOL TO WORK

1987

Prepared with a grant by the Office of Special Education Programs.

EC 220 20

BEST COPY AVAILABLE

Institute for Transition Research On
Problems of Handicapped Youth

Contract Number 300-85-0174

RFP 85-107

U.S. Department of Education

T.R.O.P.H.Y.

ANNOTATED BILIOGRAPHY
ON
TRANSITION FROM SCHOOL TO WORK

1987

ANNOUNCEMENT

This annotated bibliography was prepared as part of Contract #300-85-0174 and at the behest of the National Advisory Committee that biannually reviews the progress of Project TROPHY.

Additional citations will appear in the final version which will be available electronically through the Bulletin Board on the Cyber at the University of Washington.

The electronic edition which will be on line in the fall of 1987 will be coded for easy access by handicapping condition.

ANNOTATED BIBLIOGRAPHY

Ackerman, A., & Shapiro, E. (1984). Self-monitoring and work productivity with mentally retarded adults. Journal of Applied Behavior Analysis, 17, 403-407.

The purpose of this study was to examine the use of self-monitoring to increase the productivity of five mentally retarded adults in a sheltered workshop. Data were collected daily during a 30-minute intervention and 30-minute generalization period. Following baseline, verbal praise, prompts, and physical encouragement were administered contingent on productive behavior on a specific task during the intervention period. In the next phase, self-monitoring was trained during the intervention period. During both phases, baseline conditions prevailed in the generalization periods. In the final phase, self-monitoring was extended across the intervention and generalization periods. Results showed that increased productivity levels, evident when praise and prompting were being administered, maintained with self-monitoring alone. Minimal generalization across time was observed until self-monitoring was begun in the generalization period.

Acton, N. (1983). Internationally tomorrow. American Rehabilitation, 10(3), 27-31.

This paper offers a vision of the global disablement situation in the 21st Century. The author foresees that three massive processes that are changing some of the fundamental qualities of human life are going to have a strong impact on the disablement field. These three massive processes are: population changes, proliferation of new technology, and transformation of social processes. The processes and their interaction were discussed.

Adde, E. N. (1980). A methodological strategy for identifying similarities among jobs (No. PRR-80-25). Washington, DC: U.S. Office of Personnel Management.

A quantitative methodology for identifying similarities among federal occupations is described. The methodology is particularly suitable for evaluating the efficiency of occupational classification systems that are characterised by measures of duty and task performance. Interrelated jobs are identified from a single-linkage cluster solution and a complete-linkage cluster solution applied to the same data base. An "index of average similarity" is used to relate cluster solution to job family constructions.

Affleck, G., Allen, D., McGrade, B., & McQueeney, M. (1982). Home environments of developmentally disabled infants as a function of parent and infant characteristics. American Journal of Mental Deficiency, 86, 445-452.

Variables from three categories were inspected as correlates of Home Inventory ratings for 43 severe risk or developmentally disabled infants at 8 to 9 months post-expected date of delivery. These variables were maternal perceptions of the infant's temperament, maternal self-reported mood, and interactional characteristics of the infant as rated by a home observer. Stepwise regression analysis of Home total scores showed that infants who were viewed by their mothers as more active and by the observer as less irritable were particularly likely to experience more optimal developmental practices in the home. Significant predictors in regression equations for various of the Home subscales were: maternal ratings of the infant's mood, approach, adaptability, and rhythmicity; maternal self-reported depression, tension, and confusion; and infant pleasure in physical contact. The finding that homes of fathers with high occupational status were rated lower on Maternal Involvement and Emotional and Verbal Responsivity of the Mother is inconsistent with result of studies of the homes of developmentally normal children.

Ahlum-Heath, M. E., & Di Vesta, F. J. (1986). The effect of conscious controlled verbalization of a cognitive strategy on transfer in problem solving. Memory & Cognition, 14, 281-285.

The effect of controlled verbalization on problem solving was investigated using the Tower of Hanoi problem. Fifty college students were randomly assigned to one of five groups equivalent to a 2 x 2 factorial design with a control group. Factors that were varied were verbalization during practice sessions and verbalization during criterion sessions. Participants who verbalized which disk they were to move and what would happen solved the problem in fewer moves. A significant interactional effect of practice on the task and verbalization indicated that verbalization had the greatest effect during the initial stages of problem solving.

Alper, S. (1981). Utilizing community jobs in developing vocational curricula for severely handicapped youth. Education and Training of the Mentally Retarded, 16, 217-221.

There are at least two implications pertaining to vocational curriculum content and staff roles. The first implication is related to the question of which skills should be included in vocational curricula for severely handicapped persons. One criterion for the relevance of vocational skill would be employment. Careful job analysis can aid in determining which skills do meet this criterion. Second, if vocational training is to occur in natural setting as opposed to simulated and sheltered environments, teachers must become intimately familiar with the skills required in job sites.

Alper, S. (1985). Comparing employer and teacher identified entry-level job requisites of service occupations. Education and Training of the Mentally Retarded, 28(1), 89-96.

The present investigation compared the level of agreement between employers and classroom teachers of secondary level severely handicapped students as to employment requirements. The data obtained indicated strong agreement between employers and teachers surveyed on the skills thought to be necessary for competitive employment. Twelve skills were agreed upon as important by 90% or more of both groups. These items included: recitation verbally upon request of full name; communicating such basic needs as sickness and pain; maintenance proper grooming by cleaning self before coming to work, maintain personal hygiene by using deodorant; appearance at job on time and without prompting; and safe movement about work areas by paying attention to where they were walking.

Alper, T. G. (1978). Individual educational plans, how well do they work? (Grant from California State Department of Education, Sacramento). Hayward, CA: California State University, Department of Educational Psychology. (ERIC Document Reproduction Service No. £ED£161£235)

Data for this study was based on 265 IEPs from 13 school districts in California. Comprehensiveness, specificity, clarity, and extent to which a "least restrictive environment" is provided were among issues examined. A rating method was chosen and reliability of ratings was tested (interrater agreement - .80). Results were presented and discussed.

Altman, J. W. (1966). Research on general vocational capabilities (skills and knowledge) (Final Report). Pittsburg, PA: American Institutes for Research.

This is a report of a project conducted under a grant from the Ford Foundation by the Institute for Performance Technology, American Institutes for Research. The objectives of the project were to 1) develop and verify methods for determining general capabilities required for jobs, 2) describe the general vocational capabilities of high school students and relate them to intellectual aptitudes and educational experience and 3) derive educational implications from an analysis of these vocational capabilities. Task behavior for each of the 31 occupations having major employment opportunities in the future were translated into multiple choice test items, which organized into a set of tests resulting in a total of 24 tests, were administratered to about 10,000 students from grade 9 through to colleges. Analyses were performed separately for girls and boys and for the combined group. One of the major findings was that there is a definable and well-structured domain of

vocational capabilities which has not previously been well defined and which is not being systematically taught by educational institutions.

Ames, C. (1978). Children's achievement attributions and self-reinforcement: Effects of self-concept and competitive reward structure. Journal of Educational Psychology, 70, 345-355.

A study of self-concept and reinforcement under competitive reward contingencies. The 112 fifth grade boys and girls were compared on self-concept, attributions and self-reward after success or failure conditions. High self-concept kids used higher ability attributions after success than low self-concept kids. Discussion suggests that there may be differential effects of success and failure depending on the self perception of the child.

Ames, C. (1984a). Achievement attributions and self-instructions under competitive and individualistic goal structures. Journal of Educational Psychology, 76, 478-487.

The study compared the two goal structures with 88 fifth and sixth grade students. Children made more ability attributions in the competitive condition. In the individual condition, children displayed a mastery orientation. Girls were more likely to ascribe their failures to ability than boys.

Ames, C. (1984b). Competitive, cooperative, and individualistic goal structures: A cognitive-motivational analysis. In R. Ames & C. Ames (Eds.), Research on motivation in education: Vol 1. Student motivation (pp. 177-207). Orlando, FL: Academic Press.

This chapter reviews research on the different motivational systems which accompany the different goal structures. Ames demonstrates that a competitive goal structure promotes an egoistic or social comparison orientation, a cooperative structure elicits a moral orientation and an individual structure promotes an achievement mastery orientation.

Ammerman, H. L., & Pratzner, F. C. (1977). Performance content for job training (5 vols.). Columbus: Center for Vocational Education, Ohio State University.

This series is devoted to describing the job task inventory survey methodology and how it can be used to develop curricula and instructional materials that are required for effective job performance.

Anastasiow, N. J. (1981). Early childhood education for the handicapped in the 1980's: Recommendations. Exceptional Children, 47, 276-282.

The author interviewed 13 specialists in early childhood education for the handicapped as to their opinions regarding and hopes for the field in the next decade. These interviews are analyzed and the results presented as a series of obtainable goals for 1980's. The recommendations vary from suggestions for modification of training in universities and colleges to the establishment of family centers.

Anderson, D. S., & Blakers, C. (Eds.). (1983). National Clearinghouse on Transition from School abstracts, 2(3). Canberra: Australian National University, National Clearinghouse on Transition from School. (ERIC Document Reproduction Service No. ED 233 169)

This volume consists of abstracts, published since 1980, concerning transition from school to work in Australia. Abstracts dealt with the following issues: policy analysis and research in social and educational development, program reviews and evaluations, special education programs and services for aborigines, handicapped people, etc. A complete list of references in attached.

Anonymous. (1986). News brief: Learning how to learn project at Long Island University. Learning Disabled News: The High School to College Transition Process, 1(1), 2-3.

Section 504 is a single sentence found within the Rehabilitation Act of 1973: No otherwise qualified handicapped individual shall solely by reason of his handicap be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance. (subpart E., Section 504. Also known as civil rights act for disabled individuals). Section 504 applies to learning disabled students, too (must be allowed to enter college). Reasonable accommodations (including taped textbooks, alternative testing arrangements, and/or modified assignments) should be made to compensate for the handicapping condition, but they must not alter the content and/or standards of the course.

Archer, W. B. (1966). Computation of group job descriptions from occupational survey data (No. PRL-TR-66-12). Lackland Air Force Base, TX: Personnel Research Lab.

The analysis of occupational survey data is demonstrated in detail through the use of miniature examples. Beginning with the responses of ten incumbents to a job inventory consisting of ten task statements, composite job descriptions are derived for 1) special groups of incumbents, selected on the basis of background information data; and 2) job type members, identified by an

automated job-clustering program. Computer outputs from both types of analyses are illustrated and explained.

Armstrong, B., Johnson, D. W., & Balow, B. (1981). Effects of cooperative vs individualistic learning experiences on interpersonal attraction between learning-disabled and normal progress elementary school students. Contemporary Educational Psychology, 6, 102-109.

In a study of 40 5th & 6th grade students, of whom 10 were said to be LD, cooperative and individualistic conditions were studied in a 17 day experiment. There is a question about whether the LD subjects were LD (the SRA scores were at the average grade level, i.e., 5.4). Overall, the LD were lower than the normal progress kids in peer acceptance. There was no difference on percentage of work completed accurately but the cooperative kids did try more work. The whole statistical approach is questionable.

Artigas, J. T. (1981). The relationship between education and employment in Spain (Report No. ED-81/WS/43). Paris: United Nations Educational, Scientific, and Cultural Organization, Division of Educational Policy and Planning. (ERIC Document Reproduction Service No. ED 237 645)

The author discussed the possible impact of current technological and economic developments on the existing relationship between education and employment in Spain. He argued that the existing education system has been trying to provide training for productive work within the regular educational system, and that labor policy, both public and private, is trying to narrow the gap between schooling and employment. He concluded that there was thus cause for concern that changes in existing education/employment relations could be negative, and that readjustment demands on both parties could be difficult.

Arvey, R. D., & Mossholder, K. M. (1977). A proposed methodology for determining similarities and differences among jobs. Personnel Psychology, 30, 363-374.

A methodology for assessing statistical differences among jobs is proposed. The Position Analysis Questionnaire (McCormick, Jeanneret, & Mecham, 1972) is utilized as the basic measuring device and analyzes jobs in terms of 194 job elements or 32 basic "job dimensions." An analysis of variance (ANOVA) is performed. Both Between-Job and Within-Job factors can be identified. Further analysis is performed using Ward's (1963) hierarchial grouping analysis, a technique which clusters jobs into groups which exhibit minimum within-group and maximum between-group variation at each step in the process.

Asche, M., & Vogler, D. (1980). Employer satisfaction with secondary vocational education graduates. The Journal of Vocational Education Research, 4, 53-61.

Employers are an important source of information for vocational program development and modification over the years. A review of employer satisfaction research was recently conducted and this article discusses what appear to be major problems which exist both in research methodology and the present information base. Of the three predominant approaches, the employer follow-up seems to provide the most useful and valid data on former vocational student performance and training. The specific and general employer surveys, while perhaps an acceptable research approach for gathering supply-demand or opinion/perception data, do not appear to provide information which can be confidently used in either formative or summative evaluation of vocational programs.

Association for Retarded Citizens (ARC). (1986). Fact sheet: Association for Retarded Citizens On-the-job Training Project.

The fact sheet provides an overview of ARC, their OJT project and their follow along services. A brochure addressing issues ranging from Federal employment to employer concerns about insurance and workmans compensation is included. The brochure provide useful background information about affiemative action, myths and realities, ARC/OJT project and other employerand employee concerns. This brochure provides general information that can increase the understanding of issues confronted by persons with handicapping conditions seeking employment.

Azrin, N. H., & Philip, R. A. (1979). The Job Club Method for the job handicapped: A comparative outcome study. Rehabilitation Counseling Bulletin, 23(2), 144-155.

A comparison of the Job Club method with an alternative method was made using 154 clients who had job-finding problems, such as physical, emotional, intellectual and social handicaps, or long-term unemployment. In six months, 95% of the Job Club clients obtained jobs versus 28% of the comparison group. The jobs of the Job Club clients paid 22% more (median), were obtained sooner, were maintained, and required a median of five sessions and five interviews. The results suggest that virtually all handicapped or long-term unemployed persons could obtain and retain a job under an intensive Job Club program.

Baily, M. H., Jackson, F. M., Spence, W. M., Moberg, D. R., & Lynch, A. (1984). A comparison of Washington State and federal education for all laws. Unpublished manuscript.

Manual prepared by consultants of the Office of the Superintendent of Public Instruction. It compares and contrasts State WAC's with P.L. 94-142. This manual does not represent official policy.

Ballantyne, D., McGee, M., Patton, S., & Cohen, D. (1985). Cooperative programs for transition from school to work (Contract No. 300-83-0158). Washington, DC: U.S. Department of Education, Office of Special Education.

The results of a study of exemplary practices represented in 9 programs are presented. The data were collected via site visits to each program and interviews with significant program staff. Salient features of each project regarding vocational and transition variables are described. In the last section of the report, case descriptions of each program are presented. Results of the study are synthesized according to interagency cooperation, administrative structure, staff development, training and dissemination, and programming variables.

Banks, M. H., Jackson, P. R., Stafford, E. M., & Warr, P. B. (1983). The Job Components Inventory and the analysis of jobs requiring limited skills. Personnel Psychology, 36, 57-66.

The Jobs Components Inventory, a job analysis technique, was used to examine two contrasting groups of jobs in engineering and clerical work according to five principal sections: tools and equipment; perceptual and physical requirements; mathematical requirements; communication requirements; and decision-making and responsibility. Reliability was achieved by comparing JCI profiles from supervisors with composite profiles of job holders. The overall indication of agreement, using the Combined S test (Leach, 1979), was considered high for each principal section (significant to the .001 level). An analysis of variance (ANOVA) was used to discriminate between the three categories of: occupational areas; job titles; and organizations. Results showed that there were significant differences between the JCI profiles of office and engineering occupations and between job titles within the occupational areas. Further studies demonstrating the practical applications of JCI findings were done by Stafford, Jackson, and Banks in the areas of career guidance (1980) and in the school curriculum (1982). RW

Barbaro, F. (1982). The learning disabled college student: Some considerations for setting objectives. Journal of Learning Disabilities, 15, 599-603.

This article describes a program for learning disabled students at Adelphi University. The program includes both academic and psychological components.

of the first 22 students enrolled in a summer program, 19 enrolled in the autumn and 16 of these completed the entire first year. All had a C- average or above. Data on a second group were too vague to report.

Bargh, J. A., & Schul, Y. (1980). On the cognitive benefits of teaching. Journal of Educational Psychology, 72, 593-604.

In Study 1, the 42 undergrad subjects were told to either prepare material to take a test or to teach another person to take the test. Those who prepared to teach the material scored higher on an achievement test than those who prepared themselves. In study 2, the 121 undergrad subjects either worked alone, verbalized aloud or taught another. There were no performance differences. They conclude that preparing to teach is beneficial to cognition.

Bates, P., Suter, C., & Poelvoorde, R. M. (1985). Illinois Transition Project: Transition plan development for special education students in Illinois public schools. Springfield, IL: Governor's Planning Council on Developmental Disabilities.

The first section of this document reports the results of surveys of Governor's Planning Council members and special education administrators regarding the status of transition activities and the projected needs for transition service development. Cost projections for various employment options regarding persons with developmental disabilities are presented and described in the mid-section of the report. A set of 12 pairs of observations and recommendations regarding transition planning and services is also presented in this section. Finally, a model for transition planning and service coordination for the state of Illinois is proposed.

Bellamy, G. T., Rhodes, L. E., & Albin, J. M. (1986). Supported employment. In W. E. Kiernan & J. A. Stark (Eds.), Pathways to employment for adults with developmental disabilities (pp. 129-138). Baltimore, MD: Paul H. Brookes.

The authors review the problems with the conventional service models of the work preparation process for people with developmental disabilities and present supported employment as an alternative. They cite state studies of movement to higher level vocational services and note that fewer than 5% of the participants advance each year. They assert that the belief that skills and behaviors acquired in conventional settings will transfer to later employment preparation and work settings is untenable for those with severe disabilities. According to the authors, the primary barrier to paid employment for persons in day and work activity centers may not be lack of personal or prevocational skill, but simply lack of an opportunity to perform paid work. They conclude that the flow-through service model in which

individuals move from one service level to another has failed. The focus must be shifted from preparation for employment to actual employment.

Bellamy, G. T., Rhodes, L. E., Bourbeau, P. E., & Mank, D. M. (1982). Mental retardation services in shltered whorkshops and day activity programs: Consumer outcomes and policy alternatives. Eugene, OR: Specialized Training Program, College of Education, University of Oregon.

The authors appraise the current status of employment and related services for individuals with mental retardation who are served in sheltered workshops and day activity programs. The features of workshop and day programs could be modified to support employment. The rate of placement for all consumers from sheltered workshops into competitive employment has been reported at about 12% annually; however, 75% of all consumers placed into competitive employment are placed within one year of entering a workshop program, one third are placed during the first three months, and likelihood of placement in competitive employment after two years is only 3%. The authors advocate replacing the flow-through model of vocational services with a two-part service system, one focusing on supported or sheltered employment, the other on preparation for competitive employment. To succeed, both services would have to participate actively in a community's labor pool.

Bellamy, G. T., Rhodes, L. E., Wilcox, B., Albin, J. M., Mank, D. M., Boles, S. M., Horner, R. H., Collins, M., & Turner, J. (1984). Quality and equality in employment services for adults with severe disabilities. Journal of the Association for the Severely Handicapped, 9(4), 270-277.

Bellamy et al respond to Brown et al (1984) and argue that Brown et al's Extended Training Option is a retreat from values that have guided the development of exemplary school and community services for persons with severe handicaps. Bellamy et al agree with Brown et al (1984) that integration of severely handicapped people is important but disagree that sacrificing wages and other benefits is the way to achieve the integration and overcome limitations of thecurrent system. Bellamy et al express concern over the potential abuse of severely handicapped people working without pay. They cite federal initiatives which guide exemplary supported employment, an option which Bellamy et al believe can accomplish integration without forfeiting pay.

Bellamy, G. T., Sheehan, M. R., Horner, R. H., & Boles, S. M. (1980). Community programs for severely handicapped adults: An analysis. Journal of the Association for the Severely Handicapped, 5, 307-324.

During the last 10 years, day programs for severely handicapped adults have become a familiar component of community services. This paper examines the current status of those programs, with particular reference to the vocational options provided to participants. Concerns are raised about the lack of work opportunities, disincentives to work, lack of federal coordination, and

absence of entitlement. Strategies for effecting need change are offered for policy makers, advocates, researchers, and public school personnel.

Bender, T. A. (1986). Monitoring and the transfer of individual problem solving. Contemporary Educational Psychology, 11, 1-9.

The effects on transfer of verbalization and learning with a partner were investigated. Ninety-six college students were randomly assigned to one of four treatment groups in which vocalization or nonvocalization and working in pairs or alone were combined factorially. Monitoring during sessions where subjects learned with a partner did not transfer well to subsequent individual problem solving. Individual self-monitoring produced significantly greater transfer than group monitoring, though vocalization did not significantly improve transfer when compared with control groups.

Bennett, R. E. (1982). Applications of microcomputer technology to special education. Exceptional Children, 49(2), 101-113.

This article describes some of the ways in which microcomputers are being applied to special education. In particular application design to improve special education administration, assessment, instruction, related services, and staff development. The paper describes a number of commercially available software and hardware products.

Bensberg, G., & Ashby, G. (1981). Cooperative occupational preparation of the handicapped: Exemplary models. American Rehabilitation, 6(6).

Cooperative programs between the public schools and the state vocational rehabilitation agencies vary widely from state to state. These two agencies need to work together. A jointly sponsored program for the handicapped people who drop out of high school is more likely to be effective than either agency attacking the problem separately. The rehabilitation agency can be of great help in providing restorative services, vocational evaluation and counseling, and job placement. Personnel preparation: several of the exemplary programs stress the need for early involvement & training of the staff conducting the specialized program.

Benveniste, G. (1981). Implementation and intervention strategies: The case of P.L. 94-142 (Project Report Number 81-A18, 1-35). Stanford, CA: Institute for Research on Educational Finance and Governance.

This report examines the impact of Federal intervention on the implementation of a policy. The report contends that process controls can reduce discretion and erode service quality.

Benware, C. A., & Deci, E. L. (1984). Quality of learning with active versus passive motivational set. American Educational Research Journal, 21, 755-765.

The 40 undergrads either prepared to take a test or to teach another to take the test. Those preparing to teach had higher intrinsic motivation, had higher conceptual learning scores, and perceived themselves to be more actively engaged in learning than those preparing to take the test.

Benz, M., & Halpern, A. (1987). Transition services for secondary students with mild disabilities: A statewide perspective. Exceptional Children, 53, 507-514.

This paper reported the current status and satisfactoriness of district-level transition services. Subjects for this study included the LEA administrators, teachers, and parents of high school students with mild disabilities. Over 90% of the school districts in Oregon were represented by responses from the administrators and teachers, and two-thirds of the school districts were represented by the parents. Results showed that very few districts were using formal interagency agreement or providing other incentives to secure the involvement of community agencies. There were considerable discrepancies between the administrators and teachers regarding who was responsible for transition planning. Teachers indicated the needs of bettwe parental support and involvement in all levels of the school program. Very few districts had follow-up their previous students. This paper also compared these findings with those of other recent research. Several key elements that should be targeted for improvement were discussed.

Berkeley Planning Associates, Ca. (1983). Study of accommodations provided to handicapped employees by federal contractors (Vols. 1 and 2). Washington, DC: U.S. Department of Labor.

Berkeley Planning Associates conducted a two-part study of federal contracting employers. The national survey of 2,000 employers and the follow-up case studies of 10 of those employers focused on employer-related factors associated with hiring and accommodating disabled workers. The study found that three positive correlates of successful employment for disabled workers were the employer's size (both in number of employees and revenue), industrial classification, and attitude toward hiring disabled workers. Employers' major consideration in hiring disabled workers was not the cost of potential accommodations, but whether or not dependable workers could be secured. A major impediment to workers' successful employment was lack of prerequisite technical skills. Several additional factors identified in successful employment situations included the existance of a personnel specialist whose focus was the hiring and accommodating of disabled workers, selective placement practices by the employer, company-wide training in the policies and

responsibilities of Affirmative Action, and the involvement of disabled workers in accommodation decisions.

Berkell, D. (1982). Generalization of visual discrimination by mentally retarded children. American Journal of Mental Deficiency, 87, 350-352.

The effects of varying training settings and objects on the development of skills generalization were studied. The author hypothesized that by manipulation of these variables, mentally retarded children could be taught to generalize a particular visual discrimination skill to extra-therapy situations. Sixty retarded students were randomly assigned to treatment groups. Research procedures were identical for all groups except for the manipulation of settings and objects. A factorial analysis of co-variance supported the prediction that visual discrimination training would develop generalized avoidance skill by the students.

Berry, D. C. (1983). Metacognitive experience and transfer of logical reasoning. The Quarterly Journal of Experimental Psychology, 35A, 39-49.

The metacognitive skill of vocalization on transfer of reasoning was examined. Seventy-two undergraduates were tested with two versions of Wason's (1966) selection task to measure deductive reasoning. Vocalization during and after problem solving significantly facilitated transfer to a subsequent abstract version of the task.

Berry, D. C., & Broadbent, D. E. (1984). On the relationship between task performance and associated verbalizable knowledge. The Quarterly Journal of Experimental Psychology, 36A, 209-231.

The relationship of task performance and verbalizable knowledge was investigated in a series of three experiments using 24 Oxford graduate and undergraduate students. Practice increased performance but not verbalizable knowledge. Verbal instruction increased verbalizable knowledge but not performance. Vocalization alone increased neither performance nor verbalizable knowledge, while vocalization combined with verbal instruction increased both.

Billingsley, F. F., & Neel, R. S. (1985). Competing behaviors and their effects on skill generalization and maintenance. Analysis and Intervention in Developmental Disabilities, 5, 357-372.

This study indicates the impact of undesirable competing behaviors on the maintenance and generalization of desirable behaviors by two children with severe developmental disabilities. A combination multiple probe and withdrawal design was employed in the study. It was found that behaviors which served a relatively obvious function, and which were desired by classroom teachers, were replaced by less desirable behaviors which served the

same function within maintenance and/or generalization situations. It was further demonstrated that the desired behavior could be elicited in those situations by reducing the functionality of the less desirable response. Both general and specific implications for educational practice are discussed.

Bireley, M., & Manley, E. (1980). The learning disabled student in a college environment: A report of Wright State University's program. Journal of Learning Disabilities, 13(1), 7-10.

This article reviews the development of Wright State University's program for students with learning disabilities. The program's objectives were 1) determine the feasibility of a program for LD college students within the university framework, with students performing at acceptable academic levels; 2) identify specific needs of diagnosed learning disabled college students; and 3) develop relevant selection criteria for the admission of LD college students. The authors conclude that some individuals can overcome their LD's and graduate from a four institution. Average, or above average IQ's, a personal desire to obtain a college education and the level of personal independence all contribute to successful outcomes. The programs thus far has not proven cost effective. This is atleast impart do to the limited number of students in the program. Students that succeed also tend to require less service after their freshman year. This is good in terms of independence but makes long term follow-up difficult and reduces the number of program participants. The article reviews the types of services provided, intact procedures and reviews the status of program participants.

Blackwell, S. G., Dial, J. G., Chan, F., & McCollum, P. S. (1985). Discriminating functional levels of independent living: A neuro-psychological evaluation of mentally retarded adults. Rehabilitation Counseling Bulletin, September, 42-52.

This study attempted to identify neuropsychological factors that affect independent living for mentally retarded adults. The entire sample of participants (N = 107) consisted of 39 men and 68 women, 16 to 54 years old (mean age = 29). These participants were located in various living arrangements: institution (n = 21), intermediate care facility (n = 18), group home (n = 38), semi-independent apartment (n = 12), and independent community living (n = 18). Not surprisingly, the study found that the gross motor measure and verbal-spatial-cognitive measures were the most important factors affecting levels of independent living. Limitations and implications of findings were discussed.

Blalock, J. W. (1982). Persistent auditory language deficits in adults with learning disabilities. Journal of Learning Disabilities, 15, 604-609.

Of 80 young adults diagnosed as having learning disabilities, 63 were found to have oral language and/or auditory processing deficits. These problems

included deficits in auditory discrimination, comprehension, memory, auditory recall, oral formulation, and pronunciation of multisyllabic words. Problems in metalinguistic abilities were seen most frequently. These residual auditory deficits were reported to interfere with social and vocational functioning as well as with academic performance.

Blaschke, C. L. (1982). Microcomputers in special education: Trends and projections. Journal of Special Education Technology, 5(4), 25-27.

This paper provides a summary of current trends related to priority user needs and marketing information on microcomupter hardware and software for special education. This article is based on 1) results from project SpEd Tech, 3-5 year scenarios of various technological applications, 2) interviews of over 100 publishers/developers of software products for special education c) and reviews of surveys. The authors anticipate a dramatic increase in the availability and use of microcomputers in special education. This increase will create a demand for adaptive hardware and software, resulting in a reduction of costs. They go on to predict that section 504 of the Rehabilitation Act of 1973 will be interpreted as requiring schools to provide computers to special education classes.

Bogdan, R. (1983). A closer look at mainstreaming. Educational Forum, 67, 425-434.

Focuses on what actually went on in schools, people's opinions of mainstreaming, and what they did about it. The article also examined how the experience of mainstreaming impacted teachers, administrators and students.

Bolton, B., Rowland, P., Brookings, J., Cook, D., Taperek, P., & Short, H. (1980). Twelve years later: The vocational and psychosocial adjustment of former rehabilitation clients. Journal of Applied Rehabilitation Counseling, 2, 113-123.

Borman, W. C. (1978). Exploring upper limits of reliability and validity in job performance ratings. Journal of Applied Psychology, 63(2), 135-144.

A study of job performance ratings. Four general categories of causes of rating errors are discussed. Efforts to reduce rating errors are seen in 1) trying to find out where the ratings start going wrong; 2) rating training; 3) developing better rating formats. Results of the study showed that levels of convergent and discriminant validities were high compared to other studies but the interrater agreement was far from perfect.

Bossone, R. M., & Polishook, I. H. (Eds.). (1985). Proceedings: The Seventh Conference of the University/Urban School National Task Force: School to

work transition. New York: The Graduate School and University Center of the City University.

These conference proceedings were produced by groups from education and businesses, both in the public and private sectors. The proceedings primarily addressed several important issues, such as development of public-private partnerships, university and high school collaboration, collaboration of education and private business, etc. The Proceedings editor noted that though one of the more positive results of school-business alliances is the increasing realization of the essential role a good public school plays in the vitality of society, little it yet known about the whys and hows. All papers in this volume are theoretical, rather than data-based.

Bourbeau, P. E., Sowers, J. A., & Close, D. W. (1986). An experimental analysis of generalization of banking skills from classroom to bank settings in the community. Education and Training of the Mentally Retarded, 98-107.

The appropriateness and the effects of simulation training for teaching functional skills to mentally retarded workers are unclear at this time. This study examined the effectiveness of a banking curriculum, taught to secondary students with mild mental retardation in a classroom setting, in producing generalized performance at a real bank in the community. Method - subjects for this study were four female secondary special education students labeled EMR. I.Q. ranges were from 55 to 66. All four subjects were able to add and subtract on a calculator, but had no formal training in banking skills. A single-subject multiple baseline design with probes was used. Setting - a simulated bank was set up in the school utilizing worktables, a cardboard mockup of a teller's window, and four metal pipes and a piece of cord to simulate the waiting area and entrance to the teller's window. Two local banks were selected, one as a target bank for which the skills were trained, and a second novel bank within which probes were conducted to assess the level of generalization of in vivo training at the target bank. One probe was conducted per subject at the novel bank on the last day of school only. Results - the four students learned the banking curriculum in an average time of 4 hrs. 10 min. or approximately 6 forty-minute class sessions. 3 of the 4 subjects required additional in-vivo training to reach mastery. Most errors were related to calculation. Subjects were quickly brought to mastery in the target bank. Probes conducted in the novel bank showed errors related to differences in forms used for depository/withdrawl. Authors cite evidence that stimulus control of in-vivo training resulted in subjects responding to novel bank forms in the same way they were taught to respond to target bank forms.

Bowe, F. (1984). Accommodation circa 2,000. American Rehabilitation, 10(2), 3-4, 8.

This article looks at the promises and hopes offered by recent advances in the technology of adaptive devices that eliminate or reduce the functional limitations resulting from a handicapping condition. Problems with maintenance, distribution, and expense are discussed. Examples of current technological devices that illustrate these concerns are provided.

Bowe, F. (1985a). Black adults with disabilities: A statistical report drawn from census bureau data. Washington, DC: U.S. Government Printing Office.

Findings compiled from census bureau data included: (1) disability was markedly more common among black adults than it was among whites or Hispanics; (2) of 16,157,000 black adults aged 16-64 and not in institutions, 2,280,00, or 14.1% were disabled; and (3), most disabled blacks of working age were women. The average disabled black adult was 42 years old, had less than a high school level of education, was unemployed, and was not actively seeking employment. Income from all sources was $3,000 in 1980.

Bowe, F. (1985b). Disabled adults of Hispanic origin. Washington, DC: U.S. Government Printing Office.

This document presented data which helped describe those Hispanics of working age who reported one or more work disabilities. The average disabled Hispanic of working age was 40 years old, had a ninth-grade level education, did not work, nor was actively seeking employment. Disabled Hispanic adults of working age were much older than were other Hispanics. Almost half of all disabled Hispanics of working age were between 45 and 64 years old. Income from all sources was under $4,000 in 1980.

Bowe, F. (1985c). Disabled women in America. A statistical report drawn from Census Bureau data. Washington, DC: U.S. Government Printing Office.

This study reported that one working-age woman in every twelve was disabled. Of 74,672,000 women aged 16-64 and not in institutions, 6,319,000 or 8.5% were disabled. The average disabled woman was 51 years of age, had a high school level of education, did not work, nor was actively seeking employment. Her income from all sources was less than $3,000 in 1980. Women with work disabilities were, on average, slightly older than were disabled men and were much older than non-disabled women.

Bownas, D. A., Bosshardt, M. J., & Donnelly, L. F. (1985). A quantitative approach to evaluating training curriculum content sampling adequacy. Personnel Psychology, 38, 117-131.

A technique was developed to provide a quantitative index of the fit between training currirulum content and job task performance requirements. The method provides a measure of the match between the degree of training emphasis given each task and its relative importance to overall job success. Specifically, 1) curriculum elements in the training program and tasks performed on the job were identified, 2) ratings of the emphasis given to each task in training were obtained, and 3) the relative salience of each task to the job was determined. The technique offers a simple means of 1) obtaining a quantitative index of the match between training content and job content and 2) flagging tasks which receive improper emphasis in training.

Boyd, W. (1986). Education for All Handicapped Children Act P.L. 94-142. Unpublished.

This paper provides a brief summary of P.L. 94-142 and key court cases that have impacted its implementation. A set of handouts summarizing key issues is included. These materials were prepared by a member of TROPHY for a U of W class.

Braddock, D. (1987). Federal policy for mental retardation and developmental disabilities. Baltimore: Paul H. Brookes.

This book traces the development of 82 federal programs and funding sources related to persons with mental retardation and developmental disabilities (MR/DD). It provides individual program profiles as an analytical tool. Special programs in vocational education, vocational rehabilitation services, research and vocational rehabilitation, training of vocational rehabilitation personnel, and income maintenance programs are included in the analyses. The authors note that, with the growth of federal programs, progressively less money has been expended to coordinate them. The book documents a plateau in the amount of federal spending and a decline in support for MR/DD research and training.

Bradford, C. E. (1985). Annual report: International Associations of Machinists and Aerospace Workers, Apprenticeship, Employment, and Training. Unpublished Report. Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This Project With Industry is a national labor and industry based model designed to train and place persons with disabilities in the aerospace and machining industries. It is a unique project in that it was founded and supported by the International Association of Machinists and Areospace Workers. Initially, projects were established in Seattle Washington and

Wichita, Kansas. These projects introduce a new model to the PWI network. The approach of using the influence and participation of an international union to establish greater job opportunities for persons with handicapping conditions has proven successful. Currently there are ten project sites throughout the nation. These combined sites account for over 600 placements annually. They provide training on skilled and semi-skilled jobs.

Brady, M. P., Shores, R. E., Gunter, P., McEvoy, M. A., Fox, J., & White, C. (1984). Generalization of an adolescent's social interaction behavior via multiple peers in a classroom setting. Journal of the Association for the Severely Handicapped, 9, 278-286.

This study examined the effects of training an adolescent with autism to initiate to nonhandicapped children who were sequentially introduced to training. Using a multiple baseline design across nonhandicapped training peers, the subject's rate of social initiation and percentage of time spent in continuous, spontaneous interactions with both training and nontraining peers were examined. Results indicated that spontaneous initiations to and interactions with nonhandicapped peers increased with the introduction of the second training peer. Results indicated that across-peer generalization was more evident after training with the third peer and continued even after cessation of the training tactics. The findings contribute to an emerging data base indicating that sequential training across nonhandicapped peers is an effective means of promoting generalization of newly acquired social behavior.

Brickey, M., Browning, L., & Campbell, K. (1982). Vocational histories of sheltered workshop employees placed in Projects With Industry and competitive jobs. Mental Retardation, 20(2), 52-57.

The authors examined the job placement histories of 73 sheltered workshop employees (ages 18-57 [avg. 26.9]; IQ 27-101 [avg. 54.8]) who were placed in Projects With Industry or competitive jobs during a 30 month period. A survey requested demographic information and job information (status, type, wages, benefits, and reason for leaving last job). 60% of the people placed in 1978 were competitively employed in 1980. The most successful placements were with McDonald's. The two significant variables relating to success seemed to be: 1) group placements rather than individual placements; and 2) structured positions including detailed job descriptions which employees tended to follow closely.

Brickey, M., & Campbell, K. (1981). Fast food employment for moderately and mildly mentally retarded adults: The McDonald's Project. Mental Retardation, 19, 113-116.

This paper reports an evaluation of the joint project conducted by McDonald's and the Franklin County Program for the Mentally Retarded in Columbus, Ohio.

Success was defined as retention of 50% of handicapped employees for over one year. The subject pool consisted of 12 men and 5 women; their age range was 21 to 52 years, and IQs ranged from 37 to 70. Second-year results were that the turnover rate was zero (0); two employees left to take full-time jobs; and those employees who remained had learned more and better skills, and had advanced to positions for which they showed competence. Based on these findings, the authors suggested that fast-food employment for mentally retarded persons be developed into full-time positions within one year and that the experience of one year in these jobs shows stability, a valuable asset.

Brickman, P., Rabinowitz, V. C., Karuza, J., Coates, D., Cohn, E., & Kidder, L. (1982). Models of helping and coping. American Psychologist, 37, 368-384.

This article develops four models of helping which have implications for education. They differentiate between responsibility for problems and responsibility for solutions. In the moral model, persons are seen as responsible for both problems and solutions. The medical model suggests people are not responsible for either. The compensatory model holds responsibility for solutions but not problems and the enlightenment holds people responsible for problems but not solutions.

Bridwell, L. S. (1980). Revising strategies in twelfth grade students' transactional writing. Research in the Teaching of English, 14, 197-222.

Differences between competent and not-so-competent writers' revision strategies both with and between drafts examined. In general, poor writers revise very little or concern themselves primarily with surface-level considerations, while more competent writers address more discourse-level concerns.

Brimer, R. W., & Rouse, S. T. (1978). Post-school adjustment: A follow-up of a cooperative program for the educable mentally retarded. Journal of Special Educators of the Mentally Retarded, 14, 131-137.

Descriptive study of 30 EMR graduates from Richland County School District, South Carolina. Data showed that they were similar to normal population. Implications for school curriculum: (a) schools should counsel students in specific careers; (b) schools should teach self-care skills, manners, & communication skills; (c) schools should instruct in using job-related skills, such as time clock, coffee breaks, & calling when sick; (d) schools should train specific job skills; (e) schools should teach better utilization of community facilities; (f) schools should teach money management; (g) schools should teach leisure skills.

Brinker, R. P., & Lewis, M. (1982). Making the world work with microcomputers: A learning prosthesis for handicapped infants. Exceptional Children, 49(2), 163-170.

This paper documents the use of a contingency intervention system based on the Apple II microcomputer. Three infants with Down Syndrome were given a three month contingency intervention. The purpose was to foster a generalized expectancy that the world is controllable, and to lead the infant to use specific behavioral movements to explore the contingencies available. While the authors felt that this approach is encouraging, they had concerns as to the acceptance of this technology.

Brodie-Hasazi, S. (1984). Facilitating transition from high school: Policies and practices. American Rehabilitation, 11, 9-12.

This article summarizes the findings of a study reported in Exceptional Children on handicapped persons who exit secondary schools. Further, it identifies changes needed in policy and programming of secondary schools as well as adult service programs. Suggestions for programmatic changes include the development of local interagency agreements and transition plans, developing youth find and follow-up information retrieval systems, modifying the organizational structure of secondary schools to accommodate training in work settings, and increasing the involvement of vocational rehabilitation specialists in job training activities of secondary handicapped youth.

Brolin, D. E. (1982). Life-centered career education for exceptional children. Focus on Exceptional Children, 14, 1-15.

A career education, competency-based curriculum and a school personnel in-service training program for dimplementing the program were developed from a research project entitled PROJECT PRICE (Programming Retarded in Career Education). The project was conducted from 1970 through 1977 at the University of Wisconsin-Stout. The effort involved over 300 educators and many special education and career education experts in 12 school districts throughout the United States. The LCCE (Life-Centered Career Education) model was aimed at improving students' acquisition of 22 major competencies identified as daily living, personal-social, and occupational skills. Objectives, activities, and evaluation procedures were presented and discussed. Suggestions for implementation of the LCCE model were made.

Browder, D., Hines, C., McCarthy, L., & Fees, J. (1984). A treatment package for increasing sight word recognition for use in daily living skills. Education and Training of the Mentally Retarded, 19, 191-200.

Daily living skills are critical to community independent. To maximize effectiveness of instructions in daily living skills, teachers need procedures that are applicable to small group instruction, that promote generalization,

and that can be replicated across skills. In this study, moderately mentally retarded adults acquired and generalized daily living skills through a combination of instructions in reading instruction booklets and using the booklets to perform the tasks. The training package included time delay and an application of the Premack Principle for sight word reading and instruction on using the booklet with step-by-step prompting and praise. Procedures were effective for sets of food preparation, laundry, and telephone skills.

Brown, A. L., Kane, M. J., & Echols, C. H. (1986). Young children's mental models determine analogical transfer across problems with a common goal structure. Cognitive Development, 1, 103-121.

A group of ninety-six 3- to 5-year-olds was exposed to stories requiring a common underlying solution. Children who spontaneously focused on the goal structure in their recall of the first story or who were prompted to do so, were able to transfer the solution to the subsequent stories. Similar to Gick anbd Holyoak's (1980; 1983) methodology, but used very young children and simple analogies.

Brown, F., & Holvoet, J. (1982). Effect of systematic peer interaction on the incidental learning of two severely handicapped students. Journal of the Association for the Severely Handicapped, 7, 19-28.

This study investigated the effects of systematically including peer interaction trials during a group training session for two severely handicapped adolescent students. Both students were directly taught different three-component sequences of skills. Using a multiple baseline design, incidental learning was assessed by measuring each student's performance of the other student's skill sequence. This study also explored whether the placement of peer interaction in the sequence (i.e. whether it occurred after the first, second, or third component) affected incidental learning. Results indicated that, for one student incidental learning occurred with only minimal structured interaction between the students. Results for this student further indicated a direct relationship between placement of the interaction in the skill sequence and acquisition of the specific skills. For two of the three skills, the student showed incidental learning of the skill presented just prior to the peer interaction trial.

Brown, L., Deventer, P., Perlmutter, L., Jones, S., & Sontag, E. (1972). Effects of consequences on production rates of trainable retarded and severely emotionally disturbed students in a public school workshop. Education and Training of the Mentally Retarded, 7, 74-81.

This article demonstrated how social praise, production charts, and money were used contingently to increase the production rates of retarded and severely retarded emotionally disturbed students. Results suggested that the systematic manipulation of such consequences did result in differential

increases in productivity. A statistical analysis of parts of data suggested that IQ scores were independent of average production.

Brown, L., Ford, A., Nisbet, J., Sweet, M., Donnellan, A., & Gruenwald, L. (1983). Opportunities available when severely handicapped students attend chronological age appropriate regular schools. Journal of the Association for the Severely Handicapped, 8(1), 16-24.

The authors argue that severely handicapped students should attend, in accordance with the natural proportion, special education classes in chronological age appropriate regular schools that are close to their homes. Because it is in the best interests of students, their families, and the public, severely handicapped students should attend a school with their peers and close to home. Regular schools are more accessible, they provide enhanced opportunity for maximal participation, and they are relatively cost efficient. Socio-psychological reasons for peer group association are discussed.

Brown, L., Halpern, A., Hasazi, S., & Wehman, P. (1987). From school to adult living: A forum on issues and trends. Exceptional Children, 53, 546-554.

This article reports the personal views of four significant contributors to the transition programming in this country today. The questions were developed from ideas and concerns that discussed in many manuscripts submitted for consideration in the special issue. Some of the questions reflected concerns by professionals in this field. The contributors' responses reflect some of the concerns regarding the importance of the issues and trends suggested in the questions. Their responses also reflect a range of positions that would provoke consideration by readers.

Brown, L., Nisbet, J., Ford, A., Sweet, M., Shiraga, B., York, J., & Loomis, R. (1983). The critical need for non-school instruction in educational programs for severely handicapped students. Journal of the Association for the Severely Handicapped, 8, 71-77.

The authors trace the historical development of educational services for severely handicapped students and argue for the placement of severely handicapped students in chronological age appropriate regular schools close to home and in accordance with the natural proportion. Brown et al. argue that since severely handicapped students acquire fewer and less complex skills than their non-handicapped peers, the set of skills that they are taught should be of direct relevance to functioning effectively in the most habilitative current and subsequent environments. The primary goal should be to maximize the functioning of severely handicapped students.

Brown, L., & Pearce, E. (1970). Increasing the production rates of trainable retarded students in a public school simulated workshop. Education and Training of the Mentally Retarded, 5, 15-22.

Teacher praise and knowledge of results were used to increase the production rates of five emotionally disturbed students. When the emotionally disturbed students could perform the task consistently and efficiently, they were used as models for three trainable level retarded students. While the production rates of the three trainable level students improved, each student seemed to be affected differently by exposure to reinforced models, direct reinforcement, and knowledge of results.

Brown, L., Pumpian, I., Baumgart, D., Vanderventer, P., Ford, A., Nisbet, J., Schroeder, J., & Gruenewald, L. (1981). Longitudinal transition plans in programs for severely handicapped students. Exceptional Children, 47, 624-630.

This article discussed about segregated school models desegregated school models and rudimentary curriculum model for severely handicapped students. The basic components of individualized transition plans are: 1) must be comprehensive in nature. The ITP must be designed to represent all four curricular domains(vocational, domestic, leisure, community functioning) in reasonable proportions, 2) must be individualized in nature. The ITP precisely stated transition activities, training activities, materials & evaluation strategies that are functionally related to a unique subsequent life space, 3) must have the involvement of parent and guardian, 4) requires the actual participation of both sending and receiving personnel, 5) should include the focused expertise of competent related service personnel(therapists, social workers, etc.), 6) requires direct instruction in variety of actual subsequent environments, 7) should be longitudinal in nature.

Brown, L., Shiraga, B., York, J., Kessler, K., Strohm, B., Rogan, P., Sweet, M., Zanella, K., VanDeventer, P., & Loomis, R. (1984). Integrated work opportunities for adults with severe handicaps: The extended training option. Journal of the Association for the Severely Handicapped, 9(4), 262-269.

The authors argue for an extended training option which arranges for nonsheltered functioning while the attitudes and skills necessary for direct pay are developed but which does not necessitate working for contingent direct pay. Brown et al place a high priority on the integration of people with severe intellectual disabilities into environments that contain large numbers of nondisabled persons, because they believe that when severely disabled people do so, they do better, they achieve more, and they have a richer and more enhancing quality of life. If direct pay for work is a barrier to

functioning in an integrated environment, then the barrier should be removed to facilitate the integration.

Brown, L., Wilcox, B., Sontag, E., Vincent, B., Dodd, N., & Greunewald, L. (1977). Toward the realization of the least restrictive educational environments for severely handicapped students. AAESPH Review, 2, 195-201. Reprinted in R. J. Flynn & E. K. Nitch (Eds.), Normalization, social integration, and community services. Baltimore: University Park Press, 1980.

The position presented here is that severely handicapped students will be better educated in desegregated environments. Dimensions that relate to the concept of "least restrictive educational environment":

(1) Segregation vs integration. Both advantages & disadvantages of segregation & integration are discussed;
(2) Interactions with nonhandicapped age peer - SH students, regardless of their level of functioning, should interact in educational settings as much as possible with other nonhandicapped citizens.
(3) The ratio between handicapped and nonhandicapped students. The distribution of developmental functioning levels within school activities of settings should be comparable to the distribution that might be found in desegregated, heterogeneous, postschool communities.
(4) Chronological age-appropriate educational environments. SH students should interact with nonhandicapped students of the same chronological ages throughout their education.
(5) Architectural barriers and prosthetized environments. It is important to make all environments, all schools barrier-free for the SH students.
(6) A functional and naturalized curriculum. It is beneficial to teach the SH students with the skills necessary to function independently in a variety of environments.
(7) "Normal" organization of the school day.
(8) Equal access to school facilities and resources.
(9) Transportation.
(10) Ancillary services.

Bryant, L. E., & Budd, K. S. (1982). Self-instructional training to increase independent work performance in preschoolers. Journal of Applied Behavior Analysis, 15, 259-271.

The generalized effects of self-instructional training on the classroom performance of three impulsive preschool children were investigated using a multiple-baseline design. Self-instructional training followed Meichenbaum and Goodman's (1971) approach are used, (children are taught to verbalize a series of steps relating to the task in which they (a) define the nature of

the task, (b) focus their attention on required responses, (c) emit coping statements regarding mistakes, and (d) acknowledge their task accomplishments) except that training material consisted of naturalistic task worksheets rather than psychometric test items and training sessions were of shorter duration. For all three students, self-instructional training resulted in increased levels of accuracy on worksheets in the classroom that were similar to those used in training. The findings suggested that generalized increases in accuracy on classroom worksheets were related to the naturalistic format of the self-instructional training sessions.

Buchanan, M., & Wolf, J. S. (1986). A comprehensive study of learning disabled adults. Journal of Learning Disabilities, 19(1), 34-38.

Data on 33 LD adults were gathered after referral for career goal assessment. Only 9.1% were unemployed, but 39.4% were in post secondary situations. The women in the sample tended to have lower intellectual and achievement scores than did the males.

Budoff, M., & Hutten, L. R. (1982). Microcomputers in special education: Promises and pitfalls. Exceptional Children, 49(2), 123-128.

The authors examine the major features of current microcomputer systems and point out some of their limitations for use in special education programs.

Bullis, M., & Foss, G. (1986). Assessing the employment-related interpersonal competence of mildly mentally retarded workers. American Journal of Mental Deficiency, 91, 43-50.

Interpersonal competence is critical to the vocational tenure of mildly retarded workers. There are few tests that measure this important domain. This article describes the test of Interpersonal Competence for Employment (TICE), a measure designed to assess mildly handicapped workers' knowledge of this skill area. This procedure called for the detailed analysis of the problems that mildly retarded workers experience in the vocational setting and the identification of correct responses to those selected problems by competitive employers. The TICE was standardized on both high school and workshop populations. The authors state that the initial psychometric properties of the test are uniformly adequate and encouraging.

Burgio, L., Whitman, T., & Johnson, M. (1980). A self-instructional package for increasing attending behavior in educable mentally retarded children. Journal of Applied Behavior Analysis, 13, 443-459.

The purpose of this study was to develop a self-instructional package that would aid highly distractable retarded children in increasing their attending behavior in a training and two generalization situations. A multiple baseline design was employed in which training was sequentially introduced across

subjects. During training, the experimental subjects were taught through self-instruction to focus their attention and to cope with two tasks, math and printing. After learning the self-instructions, the subjects were systematically and sequentially exposed to photo-slided of distracting situations. The results suggested that the training package produced direct and generalized changes in self-instructional behavior. In addition, a decrease in off-task behavior occurred during math, printing, and also during a phonics program in the one-to-one and classroom situations. However, reliable changes in academic task performance were not observed.

Burkhauser, R. V., & Haveman, R. H. (1982). Disability and work: The economics of American policy. Baltimore, MD: Johns Hopkins University Press.

This report includes a profile of the working-age disabled population, with a breakdown of this group by severity of disability, race, marital status, age, amount of education, and employment status. Disability was found to be more prevalent among women than men and this disparity increases with the severity of disability. Disabled blacks were found to have a lower median age than disabled whites. Also included is an overview of public policy toward the working-age disabled and programs offered, such as income support, Social Security, Workman's compensation, and the Vocational Rehabilitation Program.

Burns, M. (1981, September). Groups of four: Solving the management problem. The Magazine for Creative Teaching, 46-51.

This is a "how to" article for organizing classroom structure to facilitate cooperative learning. Rules for organization, initiation, and teacher's role are suggested.

Burrow, W. H. (1967). Job development, a problem in inter-personal dynamics. Training School Bulletin, 64(1), 12-20.

The author explores job development techniques in training programs for mentally retarded persons. Sample: 350 possible employers in northeastern Connecticut were interviewed to examine their interest in hiring a mentally handicapped person. Nothing should be assumed when attempting to place mentally retarded people in jobs. A step-by-step list should be developed with the job placement specialist, the client, and the employer.

Burtis, P. J., Bereiter, C., Scardamalia, M., & Tetroe, J. (1983). The development of planning in writing. In C. G. Wells & B. Droll (Eds.), Exploration of children's development in writing. Chicester, England: John Wiley.

Theory of how the planning process of writing evolves from a development scenario. Planning becomes gradually differentiated from text production. In

the beginning, children's mental activity is closely tied to producing the written composition. The emergence of the plan as an object of contemplation in its own right marks a major advance in the student's development. Planning in expert writers stands out as a distinct mental activity, concentrated largely though not exclusively in the early phases of producing a composition.

Campbell, C. R., & Stremel-Campbell, K. (1982). Programming loose training as a strategy to facilitate language generalization. Journal of Applied Behavior Analysis, 15, 295-301.

This study investigated the generalization of spontaneous complex language behavior across a nontraining setting and the durability of generalization as a result of programming and loose training strategy. Method: a within subject, across-behaviors multiple-baseline design was used to examine the performance of two moderately retarded students in the use of is/are across three syntactic structures (wh questions, yes/no questions, and statements). The loose training procedure involved conducting concurrent language training within the context of an academic training task, and establishing a functional reduction in stimulus control by permitting the student to initiate a language response based on a wide array of naturally occurring stimulus events. Concurrent probes were conducted in the free play setting to assess the immediate generalization and the durability of the language behaviors. The results demonstrated that loose training was effective in establishing a specific set of language responses with the participants of this investigation. Further, both students demonstrated spontaneous use of the language behavior in the free play generalization setting and a trend was evident for generalization to continue across time. Thus, the methods used appear to be successful for training the use of is/are in three syntactic structures.

Campbell, R. T. (1983). Status attainment research: End of the beginning or beginning of the end? Sociology of Education, 56(1), 47-62.

Jencks et al. (1983) provide two replications of the Wisconsin status-attainment model, comparing their results closely to the results reported by Sewell and Hauser (1975). While concluding that the Wisconsin data are not seriously biased, they raise a number of questions regarding the interpretation of the model. Hauser et al. (1983), while not responding to the Jencks et al. paper directly, provide analyses which speak to the issues they raise. Using multiple indicators of most concepts in the model and the LISREL approach to estimation, they suggest a return to the basic causal-chain interpretation originally posited by Sewell et al. (1970). The Hauser et al. estimation procedures are complex, and this paper attempts to explicate them. While the Hauser et al. analysis answers a number of questions and clarifies some important issues, many questions remain including the following: What is the meaning and interpretation of unmeasured family background? Is a more elaborate model of the socialization process, particularly one which permits

reciprocal effects, required to understand status-attainment? Finally, what is required to deal effectively with charges that the status attainment model ignores social structure? This paper attempts to answer those questions.

Campione, J. C., Brown, A. L., Ferrara, R. A., Jones, R. S., & Steinberg, E. (1985). Breakdowns in flexible use of information: Intelligence-related differences in transfer following equivalent learning performance. Intelligence, 9, 297-315.

Intelligence-related differences in maintenance and transfer of strategy use were investigated. Groups of 25 mildly retarded and 25 normally achieving children were trained on problems adapted from the Raven Progressive Matrices Test. Maintenance and transfer were measured by the amount of help required to solve a problem. No group differences were found during training phase but the retarded group requied more help during maintenance and transfer problems. Group differences increased as the difficulty level of the problems increased.

Carlberg, C., & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta-analysis. Journal of Special Education, 14, 295-309.

Fifty primary research studies of special versus regular class placement were selected for use in a meta-analysis. Special classes were found to be significantly inferior to regular class placement for students with below average IQs, and significantly superior to regular classes for behaviorally disordered, emotionally disturbed, and learning-disabled children.

Carlberg, C. G., Kulik, C. C., Kulik, J. A., Johnson, D. W., Johnson, R., Maruyama, G., Lysakowski, R. S., Pflaum, S. W., Walberg, H. J., & Kavale, K. (1984). Meta-analysis in education: A reply to Slavin. Educational Researcher, 13(8), 16-23.

This is a reply to the article criticizing meta-analysis reports by Slavin. Each analysis is given space to criticize the criticism. The Johnsons reply that Slavin is wrong in his statements about achievement issues in the one article and that he doesn't understand the problems of integration in the other article.

Carpenter, J. B., Giorgia, M. J., & McFarland, B. P. (1975). Comparative analysis of the relative validity for subjective time rating scales (No. AFHRL-TR-75-63). Brooks Air Force Base, TX: Air Force Human Resources Lab.

The results of two separate investigations aimed at determining the inherent accuracy of job incumbents derived from job inventories are summarized. In general, five-point relative scales were found to be inferior to the other scales used in this study. It was further established that job incumbents can use scales of greater complexity (for example, a wider range of response

options) than had previously been indicated in the literature. The discrepancies in estimates of absolute time or percentage values previously reported were confirmed, but the inaccuracies within this appraoch were found to relate only to the absolute raw values. When these absolute values were treated as relative indices, no significant differences in the validity of the derived job descriptions were universally obtained.

Carver, R. P., & Hoffman, J. V. (1981). The effect of practice through repeated reading on gain in reading ability using a computer-based instructional system. Reading Research Quarterly, 16, 374-390.

The Effect of Reading Practice in a repeated readings format upon reading ability was investigated, using a computer-based instructional system. High school students who read poorly were given reading training using a recently developed technique called programmed prose, which allowed regular reading material to be automatically converted into training material. Each programmed prose passage was read and reread on a PLATO IV computer terminal until mastery was achieved. Each student was given 50 to 70 hours of individualized instruction on the terminal; over 20 measures of progress were administered each hour. There were two separate studies with six high school students in each study. The results of Study 1 were replicated in Study 2. Specific gains in fluency on the practice task were clearly evident. On one measure of general reading ability, there was a large amount of gain from about Grade Level 5 to 8; however, on another general measure of reading ability, there was little or no evidence of gain. Hence, the effect of reading practice upon gain reading ability may be limited. A theoretical interpretation of the findings is presented.

Castellani, P. J. (1987). The political economy of developmental disabilities. Baltimore: Paul H. Brookes.

This book describes the political and economic support system of services for developmentally disabled persons. It traces the recent history of developmental services and focuses its discussion primarily on community-based services. In a discussion of the implementation of policy, the author describes the main problems as relating to the development of linkages including communication, decision making, and a better understanding of the implementation task. The amalgamation of services into one comprehensive DD agency as opposed to an array of agencies is recommended.

Castles, E., & Glass, C. (1986). Training in social and interpersonal problem-solving skills for mildly and moderately mentally retarded adults. American Journal of Mental Deficiency, 91, 35-42.

The effectiveness of social-skill training, interpersonal problem-solving training, and a combination of the two in improving the social competence of 33 moderately and mildly mentally retarded adults was evaluated. Problem

situations used in the training programs and in the key assessment measures were empirically derived. Results demonstrated that treated subjects improved on role-play tests of social skills and that moderately retarded treated subjects improved relative to moderately retarded controls on the problem-solving measure. Findings also indicated that subjects receiving the interpersonal problem-solving training component improved on ratings of personal-social responsibility. Results concerning generalization of treatment gains, however, indicated that future investigations should incorporate generalization strategies into their treatment programs.

Chalfant, J., Pysh, M., & Moultrie, R. (1979). Teacher assistance teams: A model for within-building problem solving. Learning Disability Quarterly, 2, 85-96.

This study proposes a teacher support system model for classroom teachers dealing with learning and behavior problems in the classroom. Based on a survey of perceived prerequisite skills and competencies for dealing effectively with learning disorders in the classroom, the Teacher Assistance Team concept was developed to provide a day-to-day peer problem-solving group for teachers within a particular building. the goal of the team is to obtain more efficient and effective delivery of special help to children by placing the initiative for action in the hands of classroom teachers.

Cheney, D., & Gilbert, F. (1984). An examination of the social behavior of mentally retarded workers. Education and Training of the Mentally Retarded, 19, 216-221.

The purpose of this investigation was to identify problematic social/interpersonal situations of mentally retarded workers, in order to develop assessment and training materials for educational purposes. Over 1,000 hours of observation were recorded by 18 production supervisors, 18 mentally retarded workers, and 18 employers through naturalistic observation, self-reports, and structured interviews, respectively. The results of this study have identified three major areas of concern in the social/interpersonal functioning of mentally retarded workers. The first area involves a worker's interactions with his/her supervisor. The second area of concern, problems with co-workers, seems to reflect areas that impact on a worker's satisfaction with his/her work. The final area of concern is that encompassing disruptive and distractive behavior. This behavior indicates personal, self-control problems of workers.

Chennault, M. (1967). Improving the social acceptance of unpopular educable mentally retarded pupils in special classes. American Journal of Mental Deficiency, 72, 455-458.

This was a study of 64 EMR Negro students in 16 intermediate and junior high schools out of a total group of 282 EMRs. Low status EMRs were paired with

high status kids to plan and put on a class skit. There were positive changes in sociometric ratings for the low status kids but these did not generalize to others in these EMR classrooms.

Citron, C. H. (1983). Special education and the law: Issuegram ID. Denver, CO: Education Commission of the States. (ERIC Document Reproduction No. ED 236 904)

Various state and Federal laws related to education of the handicapped are outlined to aid state educators in identifying needs and formulation public school policy. Constitutional and statutory law concerning the educational rights of the handicapped are listed, including the Constitution, state constitutions, Public Law 94-142, and Section 504 of the 1973 Rehabilitation Act. The following statutory rights provided in Public Law 94-142 and Section 504 are identified and explained in detail: free appropriate education, Individualized Education Programs (IEP's), education in the least restrictive environment, fair evaluation, related services, extended school year, sports participation, and fair discipline. Several innovative state provisions are also described. The paper concludes with a list of recommended references.

Clark, R. D. (1984). Handicapped children and computers. School Psychology Review, 13, 461-468.

This article reviews the many adaptations and applications of microcomputer technology for handicapped children. The review expands Peelle's (1983) computer metaphors to include: computer as sensory enhancer, computer as agent, and computer as teacher. Specific hardware and software applications are reviewed in relation to their impact on specific handicapping conditions. It is suggested that the application of computer technology to the amelioration of handicapping condition necessarily changes our conception of handicapping conditions themselves.

Clarke, J. Y., Greenwood, L. M., Abramowitz, D. B., Bellamy, G. T. (1980). Summer jobs for vocational preparation of moderately and severely retarded adolescents. Journal of the Association for the Severely Handicapped, 5(1), 24-37.

In accordance with the increasing emphasis on skills that are directly applicable to employment situations, the program reported in this article tried to effect a realistic instruction pattern with CETA (Lane County Oregon, Comprehensive Employment and Training Act) services to provide community-based work experiences to moderately and severely handicapped high school students. Nine students learned a variety of community jobs and earned an average of $950 for their summer work. In addition to change in performance of handicapped students, the project noted change in the attitude of parents

towards their teenagers. Overall the project was successful in providing remunerative work experience to a population of students which has been historically denied such vocational opportunities.

Clements, D. H., & Gullo, D. F. (1984). Effects of computer programming on young children's cognition. Journal of Educational Psychology, 76, 1051-1058.

Computers will soon be an integral part of the classroom and home environment of children, yet there are unanswered questions concerning their effects on young children's cognition. Particularly salient are largely unsubstantiated claims concerning the cognitive benefits of computer programming. This study assessed the effects of learning computer programming on children's cognitive style (reflectivity, divergent thinking), metacognitive ability, cognitive development (operational competence, general cognitive measures), and ability to describe directions. Eighteen 6-year-old children were pretested to assess receptive vocabulary, impulsivity/reflectivity, and divergent-thinking abilities. The children were then randomly assigned to one of two treatments, computer programming or computer-assisted instruction (CAI), that lasted 12 weeks. Posttesting revealed that the programming group scored significantly higher on measures of reflectivity and on two measures of divergent thinking, whereas the CAI group showed no significant pre- to posttest differences. The programming group outperformed the CAI group on measures of metacognitive ability and ability to describe directions. No differences were found on cognitive development.

Clemmons, D. C., & Dodrill, C. B. (1983). Vocational outcomes of high school students with epilepsy. Journal of Applied Rehabilitation Counseling, 14, 49-53.

In the fall of 1982, 42 adolescents with epilepsy referred for neuropsychological testing were followed 6.44 years after testing (4.55 years after high school) with respect to vocational outcome. 43% of the sample were either employed or involved in continuing education (N = 18); 57% reported no competitive employment (N = 24). 31% were receiving federal living subsidies. 36% (N = 15) had received state vocational rehabilitation (VR) services, with a placement rate of 13% (N = 2). The low VR placement rate is consistent with recent literature. The sample demonstrated lowered performance on an expanded Halstead-Reitan Battery. Significant t-test differences ($p < .01$) were observed between working and non-working portions of the sample on the Weschler Adult Intelligence Scale and on percentage of neuropsychological tests outside normal limits. Similar results have been reported with adult epileptics seen at this Center. A discussion of priorities in rehabilitation planning and of the use of neuropsychological testing to aid in identifying vocationally "at-risk" youth is presented.

Cobb, K. B., & Danekey, A. (1986). Transitional vocational assessment. The Journal for Vocational Special Needs Education, 8(2), 3-7.

Characteristics of transitional vocational assessment models: a) it must be vocational in orientation, b) it must be comprehensive and continuous in focus, c) it must be individualized, d) it must be contemporary (as opposed to traditional) in design, e) it should stress informal instrumentation. Transitional Assessment Model: 1) screening (7 issues are suggested), 2) Placement/Planning (focuses on placing a student in contact with special services), 3) monitoring/evaluation - monitors the quality and progress of transitional services for the individual student. Assessment procedures and instrumentation should be direct, informal, frequent, and functionally related to the service provisions in the individualized transitional plan. Issues that should be focused on are indicated.

Cobb, R. B., & Phelps, L. (1983). Analyzing individualized education programs for vocational components: An exploratory study. Exceptional Children, 50, 62-64.

The purpose of this study was to examine the relative frequency of vocationally related annual goals (VRG's) appearing on the IEP's for students identified as educably mentally impaired and learning disabled. A second area of focus in the study was detailed analysis of those IEP's containing a VRG, these IEP's were examined vocational assessment information, vocational education participation on staffing teams, vocational program placement, and specific content of the vocational annual goal. A random sample of 53 IEP's from four comprehensive high schools in a large midwestern city was chosen for analysis. Within the two major disability groups, slightly less than half (49.1%) of the IEP's were found to contain at least one vocationally related annual goal. The results also indicated that EMI students were much more likely to have a VRG than were LD students. In terms of vocational program placement, more than half (51.5%) of the annual goals were written so that students were placed in a special vocational classroom exclusively for handicapped students. The results showed that extremely limited vocational education involvement in the staffing team composition. Similarly, fewer than a third of the IEP's with a vocationally related annual goal contained present levels of performance information that included vocational assessment data.

Cohen, J. S. (1967). Employer attitudes toward hiring mentally retarded individuals. In L. V. Stahlecker (Ed.), Occupational information for the mentally retarded (pp. 671-684). Springfield, IL: Charles C Thomas.

The author tried to determine and analyze the relationships between certain characteristics of employers and their expressed attitudes toward hiring retarded person. The respondents were employers and potential employers of mentally retarded students in the day-work phase of training at a training and research center in New Jersey. A questionnaire was developed to obtain data

in the areas of the employer's: (1) schooling, (2) vocational contact with retarded students from the center, (3) realistic concept of mental retardation, and (4) attitude toward hiring retarded individuals. Of the 253 questionnaires distributed, 177 (70%) were returned completed. A significant negative relation was found between schooling and attitude toward hiring retarded individuals. A significant positive relation was found between schooling and realistic concept. It appears that the mere acquisition of accurate information regarding the mentally retarded and their vocational potential does not tend to assure an accepting attitude in employment situations.

Cohen, P. A., Kulik, J. A., & Kulik, C. C. (1982). Educational outcomes of tutoring: A meta-analysis of findings. American Educational Research Journal, 19, 237-248.

In this meta-analysis of 65 studies of tutoring, differences in favor of tutoring were found for tutees and tutors for academic achievement. These differences were most pronounced for highly structured programs. Effects on liking of subject were noted but no differences were seen for self-esteem.

Colbourn, M., & McLeod, J. (1983). Computer guided educational diagnosis: A prototype expert system. Journal of Special Education Technology, 6(1), 30-39.

This article reviews the development of an expert system to be used a diagnostic tool to guide special education teachers in the development of remedial programs for students with learning disabilities. The authors review the design and implementation of the system they have developed. An overview of the required steps to evolve such a system are examined. Problems such as the amount of knowledge required for such a system, the need for central control to facilitate additions to the program and limits to microcomputer memory are discussed.

Colley, R. (1981). The Education for all Handicapped Children Act (EHA): A statutory and legal analysis. Journal of Law and Education, 10(2), 137-161.

The article concludes that the major conclusion of judicial analysis of P.L. 94-142 is that kids with special needs need special services.

Collister, L. (1975). A comparison of the long range benefits of graduation from special vs. mainstream school for mildly mentally handicapped students (Report No. 75-16). Seattle: Seattle Public Schools, Department of Planning, Research and Evaluation.

This study attempted to learn if, as special education staff believed, long-range benefits of mainstream education to graduates were greater than those of self-contained programs. Two samples, 27 special education alumni of Lincoln

High School, and 23 Pacific High graduates, were chosen. An interview questionnaire was developed and interviews with these stduents were conducted. Results show no significant difference between the two groups in the years immediately following graduation, nor was there significant difference in employment or other long-range benefits. Implications were discussed.

Combs, I. H., & Omvig, C. P. (1986). Accommodation of disabled people into employment: Perceptions of employers. Journal of Rehabilitation, 52(2), 42-45.

This study investigated employer accommodation by type of disability and size of company. The subjects were a sample of 300 companies. Through a combination of personal interview and mailed questionnaire, employer accommodation ratings were obtained for 16 disabling conditions. Physical disabilities were generally easier to accommodate than mental, with the exception of deafness or blindness. Alcoholism and drug abuse were also found to be extremely difficult to accommodate into employment. A major question raised by this research was the allocation of rehabilitation agency resources to various disabling conditions.

Commission for Vocational Education. (1984). Overview of the Carl Perkins Vocational Education Act: Public Law 98-524. Olympia, WA: Washington State Commission for Vocational Education.

This is a manual prepared by the Commission for Vocational Education, Washington State. The manual includes a copy of P.L. 98-524, a summary of the major provisions of the Act, and schematic illustrations of the purpose of each section in the Act.

Congressional Budget Office. (1979). Urban transportation for handicapped persons: Alternative federal approaches. (Report No. J932-39). 81-113.

Legislative and judicial history of section 504 of the Rehabilitation Act of 1973 pertaining to the transportation of persons with handicapping conditions.

Analyzes travel needs of persons with handicaps and considers three potential federal transportation alternatives.

Congressional Hearing. (1983). Rehabilitation Amendments of 1983. (Report No. 5543-11).

Recommends passage of S.1340, the Rehabilitation Amendments of 1983, to amend the Rehabilitation Act of 1973 to: (a) extend basic state grant programs; (b) authorize appropriations for the National Institute of Handicapped Research; (c) extend appropriations for the Helen Keller National Center for Deaf-Blind Youths and Adults; (d) establish the National council on the Handicapped as an

agency independent of the Department of Education (e) authorize appropriations for the Architectural and Transportation Barriers Compliance Board.

Congressional Hearings. (1984). Civil Rights Act of 1984. (Report No. 5521-4).

To amend Section 504 of the Rehabilitation Act of 1973 (among other laws) and clarify congressional intent regarding the scope and coverage of prohibitions against handicap discrimination by pro ding that programs and entities receiving direct or indirect Federal assistance we subject to civil rights laws on an institution-wide rather than a program-specific basis. Bill responds to Feb. 1984 Supreme Court decision inGrove City College v. Bell, holding Grove City College a recipient of Federal assistance on the basis of financial aid student enrollments, but limiting the applicability of Title IX sex nondiscrimination provisions to the financial aid program.

Congressional Hearings. (1985). Discrimination against the handicapped, rehabilitation act prohibition, legislative history, and HEW implementation.. (y4.J89/2:5.hry.98-934). (Report No. S521-4.7)

This document provides a legislative history for section 504 of the Rehabilitation Act of 1973. The main emphasis of this section is to prohibit discrimination on the basis of disability. The document also review of HEW's administrative regulations under section 504.

Connis, R. T. (1979). The effects of sequential pictorial cues, self-recording, and praise on the job task sequencing of retarded adults. Journal of Applied Behavior Analysis, 12, 355-361.

This study investigated the effects of a self-recording procedure using sequentially organized picture cues on independent task changes of four mentally retarded adults. Independent task changes were identified as the beginning of new tasks without directives or instruction. In addition to investigating treatment effects, the long term maintenance of the task change behavior was measured. During self-recording and picture-cue training, the subjects completed an increased proportion of independent task changes, and this behavior was maintained for more than 10 weeks following removal of the training procedures. Self-recording using picture cues was shown to be an effective procedure for teaching mentally retarded adults to function more independently in a job setting.

Coon, M. E., Vogelsberg, T., & Williams, W. (1981). Effects of classroom public transportation instruction on generalization to the natural

environment. Journal of the Association for the Severely Handicapped, 6, 47-53.

A severely handicapped 20-year old woman in a public school setting was taught to ride the city bus. Training was conducted in both the classroom and the natural environment. During classroom instruction, a simulated setting, consisting of chairs in rows, a coin box, a buzzer boards to represent the curb and sidewalk edges, and slides were utilized. During natural environment instruction, training occurred on actual buses. Behaviors were divided into skill clusters of bus boarding and bus departing. Each of these clusters was taught first in the classroom with generalization probes and then in the natural environment. Results indicated that skills acquired in the classroom, generalized only minimally to the natural environment. They were not demonstrated in the natural environment until natural environment training was provided.

Coonley, P., Klopfenstein, R. E., Sitlington, P., Wild, M. L., & Wright, E. (1980, April). A 15-year follow-up study of the North Kansas City Public Schools work study graduates 1966-1980. Paper presented at the 58th Annual International Convention of the Council for Exceptional Children, Philadelphia.

This excerpt contains a brief overview of the work-study program for the mildly mentally retarded at the North Kansas City Public Schools. A summary of the data collected on 62 males and 38 females who graduated from the work-study program is included as well as charts containing data on independent living and employment variables.

Cooper, L., Johnson, D. W., Johnson, R. T., & Wilderson, F. (1980). The effects of cooperative, competitive, and individualistic experiences on interpersonal attraction among heterogeneous peers. Journal of Social Psychology, 111, 243-252.

A study of effects of sex, ethnic status, and ability across different classroom structures. There were 20 students in each condition. The results basically indicate that students do what you tell them to do. The statistical analysis is very questionable. They grossly over-generalize in their discussion.

Cordoni, B. K., O'Donnell, J. P., Ramaniah, N. V., Kurtz, J., & Rosenshein, K. (1981). Wechsler adult intelligence score patterns for learning disabled young adults. Journal of Learning Disabilities, 14, 404-407.

The present investigation used the Wechsler Adult Intelligence Scale to compare the cognitive profiles of learning disabled and control young adults. Consistent with earlier research using the WISC and WISC-R, the Information, Digit Span, and Digit Symbol (i.e., Coding) subtests contribute substantially

and independently to group differentiation. Bannatyne's Sequential factor also discriminates between these groups. These subtests and Bannatyne factor group differences obtain for both average-IQ (< or = 109) and high-IQ (> or = 110) young adults. These results suggest that the deficits observed in LD children and adolescents persist into early adulthood.

Courtnage, R. (1982). A survey on the use of mediation in schools. Exceptional Children, 49(1), 75-77.

At the time of the survey, the majority of the states did not have legislation or regulations concerning the use of mediation in the schools. Responsibility and liability of school personnel is unclear and in many states may constitute an unacceptable risk.

Cox, J. L., Frank, N. L., Hocutt, A. M., & Kulidowski, B. A. (1984). An exploration of issues regarding transition services for handicapped students in secondary schools. Research Triangle Park, NC: Research Triangle Institute.

This paper reported the results of the site visits to 21 local education agencies (LEAs) who provide educational and recreational services for handicapped children in 9 states. The primary modes of data collected were interviews with LEA representatives and anecdotal reports of site visits. Major findings of the studies were that (1) educational services for handicapped youth were seldom directed at assisting in the transition to post-secondary education; (2) the majority of secondary age handicapped students are receiving prevocational or vocational services not specifically designed for them; (3) transportation to employment settings was a problem for handicapped youth; (4) the emphasis on "excellence in education" or back to basics pose problems for the education of handicapped persons; (5) federal vocational funding practices reduce the likelihood of participation in these federal programs by handicapped persons; (6) high drop-out rates from the vocational programs were indicated; (7) although transition services for the moderately and severely handicapped were more intensive, there was a lack of supported work opportunities for the graduates from these programs; (8) social security benefits served as a disincentive for employment of these persons; and (9) the state education agency seemed to have a minor influence on transition services provided for handicapped persons.

Crisafi, M. A., & Brown, A. L. (1986). Analogical transfer in very young children: Combining two separately learned solutions to reach a goal. Child Development, 57, 953-968.

In a series of five studies investigating transfer and learning of 21 to 36 children attending daycare. Two- to four-year-olds were able to combine two separately learned pieces of information to reach a goal when the task was familiar but there was no evidence of transfer to novel tasks that were

identical in logical requirements but varied in surface structure. Three-year-olds transferred across physically dissimilar problems if (1) they wee given a direct hint that the tasks were similar or (2) if they had taught the base solution to a puppet learner, thereby being forced to attend to the underlying task similarity of the problem set.

Crnic, K. A., & Pym, H. A. (1979). Training mentally retarded adults in independent living skills. Mental Retardation, 17, 13-17.

Subjects: 17 residents from eight group homes. 8 males, 9 females, ages from 19 to 30. (mean = 23.4). All functional within the mildly retarded range of intelligence, and had a history of institutionalization ranging in length from 5 to 18 years.

Procedure: Prior to training in independent living (IL) skills, objective measures of skill levels were taken in the group home to determine actual behavioral functioning. The Independent Living Screening Test was used. The Independent Living Teaching Manual was used as a guide for training the skills(nine specific areas). Each resident was trained by the group home staff, the IL project staff, or a homemaker.

Results: 14 residents were able to move successfully to independance. Factors found to be associated with successful independent living included adequate psychological skills, behavioral living skills, and accessibility of social support systems. Factors associated with unsuccessful attempts involved anxiety-induced behavioral regressions, the occurrence of overwhelmingly natural consequences of behavior, and social isolation.

Cunningham, J. W., Boese, R. R., Neab, R. W., & Pass, J. J. (1983). Systematically derived work dimensions: Factor analysis of the Occupation Analysis Inventory. Journal of Applied Psychology, 68(2), 232-252.

This research was part of an effort to develop a classification system applicable to occupational education and guidance, with emphasis on the area of occupational exploration. The report here involved the development of a structured job analysis questionaire (the Occupation Analysis Inventory, or OAI) for use as a classifying tool. A total of 602 OAI work elements were sublected to several factor analysis based on two data sets: 1) ratings of

1414 jobs on the elements and 2) ratings of the elements on their requirements for 102 defined human attributes. The resultant factors were intuitively meaningful and significantly related to the tested abilities of relevant job holders. It is believed that the job-rating factors in particular should be 1) fairly reflective of the various kinds of work activities and conditions extant in the world of work and 2) unique in their coverage of information relevant to occupational education and career decision making.

Cunningham, S. G. (1986). Two examples of excellence: The world of work can be fun and profitable. The Journal for Vocational Special Needs Education, 8, 17-20.

The purpose of this article is to describe two career/vocational programs. Indiana-practical Vocational Education. Academic Phase - the academic core classroom teaches the basic fundamentals of math, science, social studies, and language arts. These subject areas are taught as a practical application rather than a theoretical, textbook approach. Instruction responsibilities also include: 1) teaching each student community living and workplace survival skills, 2) serving as a friend and advisor in matters related to the student's mental comfort and social well being, 3) developing each student's self-esteem and self-concept. Occupational Phase: 1) Prevocational Experience Laboratory: is designed to allow students to explore many occupations through simulation or duplication of actual job responsibilities, 2) On-the-job work experience is designed to provide the students with actual work experience under the supervision of the work placement coordinator. Kansas-Vocational Special Needs Level V Program. Academic Phase - students can obtain their academic subject credits by being mainstreamed into regular class. Occupational Phase - emphasis on career awareness, and exploration, the development employability skills, the study of occupational clusters, and community job tryouts.

Curtis, W. S., & Donlon, E. T. (1983). A ten-year follow-up study of deaf-blind children. Exceptional Children, 50, 449-455.

In 1970 the authors completed and published a study of the characteristics of 100 deaf-blind children who had just entered educational programs established through regional centers; these centers had been generated by federal support immediately following the rubella epidemic of the mid-1960s. These children were evaluated for educational adjustment and communication level through structured observation. In 1982, a follow-up study of the children's progress was initiated with the assistance of the South-eastern Regional Center for the Deaf-Blind at Talladega, Alabama, and the Callier Center, Dallas, Texas, which maintains a national registry for the deaf-blind. The registry identified 15 of the children from the original study. An additional 22 were located through direct follow-up efforts of the staff at the South-eastern Regional Center. The data for this report was drawn from this sample of 37 of the original 100 children. Employment status was not addressed, not was type of

vocational education. A comparison of the children's general level of functioning at first data-collection and at follow-up was repoted in those instances where the two reporting tools were compatible. In conclusion, the authors note the relative limitations of the surveying instruments used. This report is of little value.

Cuvo, A., Leaf, R., & Borakove, L. (1978). Teaching janitorial skills to the mentally retarded: Acquisition, generalization, and maintenance. Journal of Applied Behavior Analysis, 11, 345-355.

This experiment was to train mentally retarded youths to perform the janitorial tasks independently. A task analysis of janitorial skills required for cleaning a restroom was performed. Six subtasks with a total of 181 component responses were identified. Subjects were required to progress through a series of four prompt levels orders from more to less direct assistance for 20 of the most difficult steps. Another series of four prompts, ordered from less to more direct assistance, was used to teach the other 161 responses. A multiple baseline across subjects and subtasks was employed to evaluate the efficacy of the procedures. Six moderately retarded adolescents were trained in their public school. The results show rapid acquisition, skill generalization to a second restroom, and maintenance of the newly learned behavior. This study provided evidence of a model for analyzing and training vocational skills to the mentally retarded.

Czajka, J. L., Smith, M. F., & Gabe, T. (1984). Digest of data on persons with disabilities. Report to Congress by the National Institute of Handicapped Research, Office of Special Education ()

This document is a compilation of both published and previously unpublished data on persons with disabilities and includes such topics as impairments, work disabilities, limitations of activity, and employment. Data are presented in table and chart form. Highlights and explanatory notes accompany each table to assist the reader in interpreting the data. Data on employment in 1978: there were 22 million persons with handicapping conditions between ages 16-64, 12 million were not in the labor market. The Unemployment rate for persons with handicapping conditions was 7.0%, for non-handicap 4.5%. There were 6 million men, and 3.6 million women with disabilities in the labor market. Unemployment rates were 5.8% for men and 9% for women. Eleven million individuals were determined to have severe handicapping conditions, only 1.5 million of whom were in the labor market.

Dalis, G. T. (1970). Effect of precise objectives upon student achievement in health education. The Journal of Experimental Education, 39(2), 20-23.

This study explored the effects on learning if students are provided with precise instructional objectives before instruction begins. The subject pool consisted of 143 tenth-grade students from a predominantly middle and upper-

middle class high school. Findings were in favor of the treated group (mean = 8.9) while the control group achieved a mean of 2.2. This suggests that students guided by precise information on objectives had a better gain from the instruction while the control group seemed confused and unable to select activities that help them reach their goals.

Datoff, V. P. (1985). Annual report for the National Association of Rehabilitation Facilities (unpublished report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This report presents the accomplishments of the National Association of Rehabilitation Facilities' Projects With Industry. It summarizes the major objectives and achievements of the project over a seven-year period. If PWI facility participants continue to make placements at their current rate, 390 persons will be placed by the completion of the project year on September 30, 1985.

Davies, R., & Rogers, E. (1985). Social skills training with persons who are mentally retarded. Mental Retardation, 23, 186-196.

A placement of institutionalized persons with mental retardation in the community has resulted in increased interest in social skills. If persons with mental retardation are to participate in activities with members of their community, they will need to develop skills that promote social interaction. Currently, however, there is little evidence to suggest that deinstitutionalized clients are being adequately integrated into community. This article reviewed social skills interventions that have been attempted with persons with mental retardation, beginning with the less complex skills and moving to multifaceted skills. Summary tables are presented which list the skills taught, the instructional methods used, the effectiveness of the intervention, and the generalization effects.

Deci, E. L., Nezlek, J., & Sheinman, L. (1980). Characteristics of the rewarder and intrinsic motivation of the rewardee. Journal of Personality and Social Psychology, 40(1), 1-10.

This was a field study of 610 children in grades 4 through six in 35 classrooms. Measures of perceived causation and autonomy were taken on children in the spring and fall as well as a measure of classroom climate. Teachers were assessed on an autonomy/control orientation. Relationships were observed between teacher orientation and student beliefs. Differences were observed at six weeks into the year but did not get stronger.

Decker, W. T., Polloway, E. A., & Decker, B. B. (1985). Help for the LD college student. Academic Therapy, 20, 339-345.

The authors present an approach to programming for LD college students that focuses on the interrelationship of academic, social, psychological, vocational, and possible medical problems. They also make specific recommendations on ways to deal with these problems. Assessment of the severity of the students problems can be determined by interviews, and achievement, stress and anxiety measures. Interventions should include small peer group counseling sessions to build a social support network, training in relaxation techniques paired to cue words, modifying thinking processes to reduce stress and promote more rational task orientated thoughts. Students should also receive training in effective study techniques, test preparation, time management, and test taking behavior.

Deitel, H. (1984). Computers and communications - Improving the employability of persons with handicapped. The Journal for Vocational Special Needs Education, 6(3), 3-6.

The article discussed how computerized devices can be used to help: 1) persons with visual impairment, 2) persons with physical impairment, 3) persons with speech and language impairment, 4) deaf persons, 5) with transportation/work-at-home. Computer also is a one-to-one educational and instructional device.

DeJong, G., & Lifuhez, R. (1983). Physical disability and public policy. Scientific American, 248(6), 40-49.

Section 504 bars discrimination on the basis of handicap in any program or activity benefiting directly or indirectly from Federal financial aid. The author calls this the most controversial and most litigated piece of legislation. In essence, the Act extends a previously uncodified form of civil-rights protection to disabled Americans and is therefore sometimes called the Civil Rights Act of the Handicapped. Initially, there was little opposition to the Act, followed by public backlash. Also, the Reagan Administration showed reluctance to enforce the new laws. This article focuses on the removal of architectural barriers to the progress and well-being of people with disabilities. History of the barrier-free movement (behind 502 and 504) is as follows: It began in 1958, preceding the independent-living movement. In 1961, the American National Standards Institute (ANSI), a private architectural standard-setting organization, issued Standard A117.1, specifying minimum standards. In 1973, Section 502 and 504 established the accessibility requirements. All 50 states have enacted laws requiring that certain facilities be made accessible, but these laws vary widely in specificity. In the author's opinion, accessibility is still a problem. One of the biggest problems is the application of accessibility standards to different settings. In addition, clients are reluctant to

approach the issue of accessibility because of one of three attitudes: (1) disabled people are not viewed as customers, clients, or tenants; (2) barrier-free design is assumed to be too expensive; and (3) disabled people are thought likely to stigmatize the facilities in the minds of the non-disabled users. Two of the authors solutions include (1) technical assistance and (2) economic incentives.

Department of Health, Education, and Welfare. (1977). Nondiscrimination on basis of handicap. Federal Register.

Implements section 504 of the Rehabilitation Act of 1973, 29 USC 706, with regard to federal financial assistance administered by the department of HEW. Forbids employment discrimination on the basis of handicap; programs and facilities must be made accessible. Section 7(6) of the 1973 Act defined the term handicapped individual in terms of employment, but section 111(1) of the Rehabilitation Acts of 1974 (P.L. 93-516) eliminated this limitation, so it included a physical or mental impairment which substantially limits one or more of such a person's major life activities. Section 504 thus represents the first Federal civil rights law protecting the rights of the handicapped persons. The very general language and scant legislative history provide little guidance. The problems of 504 include (1) different treatment may be necessary in order to ensure equal opportunity and (2) major burdens and costs may be encountered. In addition, this piece of literature includes a detailed section-by-section analysis of the regulation.

Deshler, D., Alley, G., Warner, M., & Schumaker, J. (1981). Instructional practices for promoting skill acquisition and generalization in severely learning disabled adolescents. Learning Disability Quarterly, 4, 415-421.

This article has outlined some procedures for facilitation the acquisition and generalization of skills by severely learning disabled adolescents. The steps and techniques discussed are currently being researched in depth at the University of Kansas Institute for Research in Learning Disabilities in order to determine the relative importance of each technique. First students are taught a specific strategy in isolation before being asked to apply it to controlled materials, and later to transfer the strategy to regular-class content. Unless sound instructional practices are implemented, the performance of SLD students is adversely affected.

DeVries, P. B., et al. (1980). Task analysis handbook (No. TR-79-45 II). August 18.

The handbook provides a validated set of procedures and guidelines for analyzing tasks into subtasks and supporting skills and knowledge. The handbook is designed for use in technical training by subject matter experts. It assumes that tasks have already been selected for training, that trainee proficiency levels have been determined, and that the trainee population is

known. There are three major stages of the task analysis procedure according to the authors. They are: a) development of preliminary performance requirements, b) identification of subtasks, c) identification of supporting skills and knowledge.

Dipboye, R. L., & de Pontbriand, R. (1981). Correlates of employee reactions to performance appraisals and appraisal systems. Journal of Applied Psychology, 66(2), 248-251.

A study of the employees' (n = 474) opinions and perceptions of the appraisal process. The results showed that employees' opinions of the appraisal and appraisal system were positive to the extent they believed that 1) there was an opportunity to state their own side of the issue; 2) the factors on which they were evaluated were job relevant; and 3) objectives and plans were discussed.

DiPrete, T. A. (1981). Unemployment over the life cycle: Racial differences and the effect of changing economic conditions. American Journal of Sociology, 87(2), 286-306.

Goals of this study were to explore and analyze the relationship between age and unemployment experience, between other job and household characteristics and level of risk for unemployment, jobb tenure and unemployment risk, and aggregate differences in unemployment experience across racial groups. Data for this study was drawn from the Panel Study of Income Dynamics during 1968-1976 for male heads of households between 25 and 54 years of age. Findings revealed that (1) the frequency of unemployment periods declined with age and with increased job tenure, (2) racial differences has a strong effect on unemployment experiences, and (3) job tenure is the most important determinant of the risk of unemployment.

Di Vesta, F. J., & Peverly, S. T. (1984). The effects of encoding variability, processing activity, and rule-examples sequence on the transfer of conceptual rules. Journal of Educational Psychology, 76, 108-119.

This study, using 85 undergraduate students, supported Nitsch's (1978/1979) findings that those who practiced on examples of concepts from varied contexts performed equally well on near-transfer tasks as those who practiced on homogenous, same-context examples. However, those who practiced on examples from varied contexts performed better on far-transfer tasks. The study also investigated effectiveness of various sequences of presentation of the general concept rule and examples. Both concept definitions followed immediately by practice examples and practice examples given the first day with concept definitions just prior to the test produced better recall than practice examples followed immediately by concept definitions. Subjects who were required to actively organize practice examples outperformed those who were given materials already organized for them.

Division of Educational Services Special Education Programs. (1985). Seventh annual report to Congress on the implementation of the Education of the Handicapped Act. Washington, DC: U.S. Department of Special Education and Rehabilitation Services.

This report to Congress was mandated by Section 618, of P.L. 98-199. Its purpose is to provide information regarding progress in the implementation of the Education of the Handicapped Act. The report provides information on: who and how many students receive special education services; implementation of policies and programs to assure services are provided in the least restrictive environment, and the provision of related services; the Federal role in the provision of services; and effort to assess and assure the effectiveness of programs in educating children.

Donnillan, A., & Mirenda, P. (1983). A model for analyzing instructional components to facilitate generalization for severely handicapped students. The Journal of Special Education, 17, 319-331.

A model is presented for analyzing the components of instructional programs that are likely to affect generalization with severely handicapped. The literature is summarized in terms of such issues as natural vs. artificial environments, materials, cues, and contingencies. The authors also review empirical evidence about the relative efficiacy of serial vs. concurrent presentation, prompts vs. corrections, and various instructional arrangements. Suggestions are offered for implementation, and research needs are described for several components.

Doverspike, D., Carlisi, A. M., Barrett, G. V., & Alexander, R. A. (1983). Generalizability analysis of a point-method job evaluation instrument. Journal of Applied Psychology, 68, 476-483.

Job evaluation, in particular the point methods, is widely used in industry to determine the similarity of jobs with respect to their skills, effort, responsibility, and working conditions. Most of the job evaluation research was done in the late 1940s, and research on the subject has virtually been abandoned since then. But recently, criticisms of job evaluation have been leveled at the reliability of job evaluation ratings, or the ability of raters to demonstrate substantial agreement in their judgments of the worth of jobs. One of the major conclusions is that the reliability of job evaluation as a method for determining the worth of jobs was found to rely on subjective judgments. The present study was undertaken to reexamine the reliability of a point method of job evalution in the context of generalizability theory (Cardinet, et al., 1972). The result of the generalizability analysis revealed that adequate levels of reliability were reached when 10 trained raters, with sufficient job-relevant information, made job evaluation using a properly designed point system of job evaluation. It was also found that

reliability dropped only slightly when the number of raters, assumed to be sampled at random from the universe of trained raters, was reduced from 10 to 1.

Drake, H. M., et al. (1978). An evaluation of the deinstitutionalization process in the U.S. DHEW Region X. Olympia, WA: State of Washington Department of Social and Health Services, Planning & Research Division.

This study attempted to clarify the nature of the adjustment failures after release from the hospital or school. Questions addressed in the research through specific studies included: whether there were barriers to the receipt of aftercare services by clients discharged from state institutions for the mentally disabled in Idaho and Washington, and how were mentally disabled clients linked into community services. Included is a long list of findings substantiated with data based research.

Drauden, G. M., & Peterson, N. G. (1977). Domain-sampling approach to job analysis. JSAS Catalog of Selected Documents in Psychology, 7, 27-28.

A step-by-step guide for obtaining job analysis information that meets Equal Employment Opportunity coordinating Council (EEOCC) guideline is provided. The manual details the development of a job analysis questionnaire through group brainstorming sessions, the collection of questionnaire results from samples of job incumbents, and the analysis of the questionnaire results by means of computer programs. The most important elements of the method are as follows: 1) as emphasis on task checklists that describe a job in terms of the behaviors that constitute that job; 2) a reliance on relative percentage of time spent on tasks as the major indicator of task criticalness; and 3) a matrix-rating technique with which job incumbents identify the knowledge, skills and abilities that are necessary to perform each of the job tasks.

Durker, P. C., & Morsink, H. (1984). Acquisition and cross-setting generalization of manual signs with severely retarded individuals. Journal of Applied Behavior Analysis, 17, 93-103.

This study assessed the effect of a transfer of stimulus control procedure on the acquisition and cross-setting generalization of manual signs with four profoundly retarded individuals. Two individuals were trained to produce appropriate signs to verbal instructions, whereas the other two were trained until manual signs were controlled by visual stimuli (objects). Data obtained from three probe situations (two for one individual) constituted the dependent variables of the investigation. The results showed that a) individuals acquired the trained signed and b) maintenance and generalization across settings and persons occurred, but was highly variable between and within individuals.

Dussault, W. L. E. (1986). The student and the law: Special education programs under federal and state laws. 1986 Washington State School Law Seminar, 1-25.

This document provides an overview of Federal and state legislation and court cases concerning the provision of special education services. The constitutional rights to an appropriate education at public expense are discussed. Key court decisions are summarized, and differences in laws and regulations are identified. The key provisions of P.L. 94-142 and also discussed.

Dyer, K., Schwartz, I. S., & Luce, S. C. (1984). A supervision program for increasing functional activities for severely handicapped students in a residential setting. Journal of Applied Behavior Analysis, 17, 249-259.

This study was designed to increase the amount of time severely handicapped students living in a residential facility engaged in age-appropriate and functional activities. After brief in-service training, a program involving instructions to supervisors and staff feedback was implemented in a multiple-baseline design across settings. Results showed that after the supervision program was implemented, the students' participation in activities increased. Further, these increases were maintained when feedback was reduced from an average of 3 days a week during treatment, to once a month for a 5-month period.

Edgar, E., & Hayden, A. R. (1982). Who are the children special education should serve? And how many children are there? Unpublished manuscript.

This paper attempts to answer the questions who are the students in special education in our public schools, and how many are there. A review of 10,000 student in special education indicated that about 1.6% of the total school population have quantifiable handicapping conditions. The remainder of the students in special education have performance deficits. The authors suggest that at least some of the non-quantifiable students might receive a better education in the regular classroom.

Edgar, E., Levine, P., & Maddox, M. (1985). Washington State follow-up data of former secondary special education students. Unpublished manuscript.

This report provides information derived from three studies that examine what happens to students with handicapping conditions once they leave special education programs. The five-year follow-up study is a cross sectional study of all students who have left a special education program during a five-year period. Information on post secondary activities was gathered via a one time only telephone communications with the parents. The three year follow along study is a longitudinal study of all students leaving special education programs in a given school district during the most recent year. Telephone

interviews with parents are scheduled for six month intervals. And the seventh grade study examines all seventh grade students in special education. The report provides numerical data that describes the students, their employment status, residential status, post special education training and parents satisfaction. Information is also provided for a nonhandicapped cohort.

Edgerton, R. (1986). Alcohol and drug use by mentally retarded adults. American Journal of Mental Deficiency, 90, 602-609.

Data from ethnographic studies of four samples of retarded adults living in a variety of community settings confirm the findings of earlier studies showing that neither alcohol nor drugs impaired the adaptation of most of these persons. Moreover, compared to their non-retarded parents, siblings, spouses, and friends, these retarded persons less often: a) used alcohol and other drugs, b) used these substances so heavily that they were labeled by others or themselves as abusers, and c) engaged in deviant or criminal behavior associated with the use of alcohol or other drugs.

Elder, J. (1984). Life after school: Job opportunities for developmentally disabled people. American Rehabilitation, 10, 26-30.

In reaction to a report prepared by the Inspector General of the Department of Health and Human Services, the author pointed out the discontinuity in the transition process for developmentally disabled students between secondary school graduation and employment. The author called for a joint effort by the Vocational Rehabilitation and the Project With Industry (PWI) to solicit jos from employers and find developmentally disabled adults to fill those jobs.

Elder, J. O., & Magrab, P. R. (1980). Coordinating services to handicapped children: A handbook for interagency collaboration. Baltimore: Paul H. Brookes.

This book is a broad-based reference source pertaining to all services for handicapped children, youth, and adults. Certain chapters include information specifically pertinent to transition planning, interagency collaboration, and policy development. For instance, Chapter 1 lays the foundation for the development of interagency collaboration focusing on the need and basis for it. In Chapter 2, Robert Audette typifies interagency agreements according to three classes: (a) baseline standards for program conduct across agencies; (b) resource allocation agreements; and (c) commitments to uniform proccedures, forms, and standards. In Chapter 5, Richard Zeller elaborates on use of a direction service or direction center for interagency collaboration, and advocates for their adoption. In direction services, the foundation for a distinct interagency, with authority and responsibility that may avoid parochial concerns of single agencies, are presented.

Elliott-Faust, D. J., Pressley, M., & Dalecki, L. B. (1986). Process training to improve children's referential communication: Asher and Wigfield (1981) revisited. Journal of Educational Psychology, 78, 22-26.

Improvement on performance of referential communication tasks was improved by process training in comparison and evaluation of clues with referents and nonreferents. Supportive of Asher's work.

Elmore, R. (1985). State options for special student populations. Unpublished manuscript.

This paper describes the legal and educational rationale for special needs programs. It describes existing state and federal policy toward students with special needs. It examines four sets of problems involved in the design of state policy for special needs students: information, internal boundaries, incentives, and administrative and fiscal consequences. It recommends action under each set of problems. And it concludes with a discussion of broader strategic issues confronting the state in this area.

Emener, W. G., & McHargue, J. M. (1978). Employer attitudes toward the employment and placement of the handicapped. Journal of Applied Rehabilitation Counseling, 9(3), 120-125.

The authors tried to discover 1) employer attitudes toward employing the handicapped; 2) employer expectations from VR counseling; 3) types of information desired by employers when considering hiring a handicapped person. Fifty-seven employers of stratified rural, small town, and metropolitan Florida businesses which had or had not hired handicapped people completed the 37-item Employer Attitude Survey Questionnaire. Findings included: counselors should not preconceive employers' attitudes, sophistication, or willingness to hire; and employer must be educated and needs to be reassured that a handicapped employee who needs support will not be abandoned after s/he is hired.

Engen-Wedin, N., & Collins, B. (1985). Composition, word processing, and the learning disabled college writer: An annotated bibliography. St. Paul: University of Minnesota, Disabled College Project.

This is an annotated bibliography of over 100 articles on the use of word processing techniques for teaching writing skills and some articles to the learning disabled.

Erickson, D. C. (1985). Annual report: Tacoma Goodwill Industries Rehabilitation Center, Inc. Unpublished report, U.S. Department of Education, Rehabilitation Services Administration, Region X, Seattle, WA.

This report provides an overview of the organizational structure services, goals and outcomes of the Advocacy for Handicapped and Employers Project With Industry (PWI) program. It includes information regarding each individual that has or is receiving services.

Eschenbrenner, J. A., et al. (1981). Methods for collecting and analyzing task analysis data. JSAS Catalog of Selected Documents in Psychology, 11(2), 38.

Task analysis, according to the author, is the process of partitioning job tasks into component subtasks and identifying the skills and knowledge required to support task performance. But the author realized that a wide range of non-standardized task analysis procedures are in use throughout the training community. Implementation of a standardized procedure for identifying essential subtasks and supporting skills and knowledges was expected to hold considerable potential for increasing training efficiency and reducing training costs. In this study, a simplified task analysis procedure and documentation system was specified, and a task analysis handbook was prepared. The handbook procedures were tested at six Air Force installations. Results indicated that the handbook procedures met the design criteria of simplicity, validity, reliability, and time-efficiency/cost-effectiveness. The feasibility and utility of implementing a computer-based task analysis data bank was assessed, and a preliminary data bank design was then developed.

Eyman, R., Demaine, G., & Lei, T-J. (1979). Relationship between community environments and resident changes in adaptive behavior: A path model. American Journal of Mental Deficiency, 83, 330-338.

The relationship between environmental ratings of community homes using factor scores derived from Wolfensberger and Glenn's Program Analysis of Service Systems (PASS) and changes in adaptive behavior of residents living in those facilities was investigated. A path analysis was used to relate resident characteristics, e.g.: age, IQ, and initial score on adaptive behavior, with six PASS environmental ratings and both of these sets of variables with average annual change in adaptive behavior over a 3-year period. The results showed that a number of PASS scores were significantly associated with positive change in adaptive behavior for specified types of residents. The most general finding was that older, less retarded residents improved in all aspects of adaptive behavior in conjunction with positive rating on items dealing with comfort and deployment of staff, access to the home, local proximity of services, and blending with the neighborhood.

Eysenck, H. J. (1986). Inspection time and intelligence: A historical introduction. Personality and Individual Differences, 7, 603-607.

Review of literature on reaction time and intelligence to which entire edition of journal is dedicated. Proposes error-free transmission of information through the cortex as the fundamental variable in general intelligence; it is the error rate which is the fundamental variable rather than speed.

Eysenck, H. J. (1986). Toward a new model of intelligence. Personality and Individual Differences, 7, 731-736.

Introduction to the Weiss article. Suggests speed of information processing is a fundamental property of biological intelligence. This theory of intelligence allows one to use absolute values on a physical scale, intepreted in terms of information processing.

Fafard, M. B., Hanlon, R. E., & Bryson, E. A. (1986). Jose P. v. Ambach: Progress toward compliance. Exceptional Children, 52, 313-322.

Jose P. v. Ambach is a class action lawsuit involving the rights of handicapped students to be referred, evaluated, and placed in a timely fashion into appropriate educational programs and services in the New York City public schools. The role of this case as a vehicle in the restructuring of the delivery of special education services is discussed. The major issues, including timely evaluation and placement, due process procedures, accessibility of facilities, and systematic monitoring of the delivery of services, are analyzed in terms of the impact on the delivery of special education services. The current status of this ongoing litigation, the progress toward compliance, and some of the implications for special education are presented.

Fafard, M. B., & Haubrich, P. A. (1981). Vocational and social adjustment of learning disabled young adults: A follow-up study. Learning Disability Quarterly, 4, 122-130.

Twenty-one young adults who had received educational services for learning disabilities as young children were interviewed in regard to their adjustment as adults. An interview technique was used to obtain: (a) demographic information, (b) school adjustment information, (c) vocational adjustment information, and (d) social adjustment information. Analysis of the results indicated that the majority of subjects 1) had required additional supportive educational service throughout their schooling; 2) needed vocational assistance; and 3) were often dependent on family support for social activities. The findings are discussed in terms of future investigation with learning disabled adolescents.

Faigley, L., & Witte, S. (1981). Analyzing revision. College Composition and Communication, 32, 400-414.

The authors propose a taxonomy for classifying and characterizing the nature of changes that occur during revision and use the system they have devised to study the differences between student and expert writers. Expert strategies vary considerably, whereas student writers concentrate on surface changes that do not significantly alter the quality of their writing.

Falvey, M., Brown, L., Lyon, S., Baumgart, D., & Schroeder, J. (1980). Strategies for using cues and correction procedures. In W. Sailor, B. Wilcox, & C. Brown (Eds.), Methods of instruction for severely handicapped students (pp. 109-133). Baltimore: Paul H. Brookes.

It is critical that severely handicapped students are taught to perform those skills in response to the cues & correction procedures that occur in natural environments. One cannot infer that, because a severely handicapped student can perform a particular skill in response to one set of cues and correction procedures, he or she will also perform when different cues and correction procedures are employed. Severely handicapped students should be taught to respond to as many current and subsequent natural environments as possible. Cues & correction procedures are discussed:

(1) primed correction procedures
(2) modeled cues and/or modeled correction procedures
(3) direct verbal cues and/or direct verbal correction procedures
(4) indirect verbal cues and/or indirect verbal correction procedures
(5) general cues and/or gestured correction procedures
(6) pictorial cues and/or pictorial correction procedures

An ecological inventory strategy is helpful for developing appropriate cues and correction procedures of a specific behavior. It is suggested that the teacher should observe the activity taking place in the natural environment.

Fantuzzo, J., & Clement, P. (1981). Generalization of the effects of teachers and self-administered token reinforcers to nontreated students. Journal of Applied Behavior Analysis, 14, 435-447.

The present study investigated the effect of self-reinforcement and teacher-administered reinforcers on generalization. The study explored three categories of generalization: subject generalization, response generalization, and subject-response generalization. Ten, black, second-grade boys served in a series of single-subject studies. The target behavior was attending. One boy was a therapeutic confederate. The remaining nine nontreated students, three observed the confederate reinforced by a teacher,

three observed the confederate self-reinforce without having an opportunity to use "self-reinforcement" themselves, and three observed self-reinforcement while having an oppportunity to use "self-reinforcement." The results showed that teacher-administered reinforcers to the confederate did not produce generalizatin of any kind. Both arrangements of self-administered reinforcers to the confederate produced across-subjects generalization. Additionally, the confederate manisfested response generalization.

Fardig, D. B., Algozzine, R. F., Schwartz, S. E., Hensel, J. W., & Westling, D. L. (1985). Postsecondary vocational adjustment of rural, mildly handicapped students. Exceptional Children, 52(2), 115-121.

This article reports results of a study of the occupational status of 113 mildly handicapped former students from 4 school districts in rural areas of Florida. To quantify previous and current employment status of these students, an Employment Training Index (ETI) was developed, based on Halpern's (1973) model. Data collected included school careers and employment history. A regression analysis was performed to predict employment adjustment from school experience and academic achievement. Results were tablated and discussed.

Feagans, L., & Short, E. J. (1986). Referential communication and reading performance in learning disabled children over a 3-year period. Developmental Psychology, 22, 177-183.

This study indicated that learning disabled and normal children differ on referential communication measures, both in terms of listener and speaker competence. The ability to produce competent verbal messages was highly related to reading comprehension for learning disabled but not for normal children. IQs prdicted reading comprehension for normal children but not for learning disabled children.

Federal Program Advisory Service. (1985). Handicapped requirements handbook.

This document provides a list of all laws, regulations, executive orders and Supreme Court decisions pertaining to the delivery of post-secondary education services for persons with handicapping conditions. It is updated monthly.

Fenderson, D. A. (1984). Computer as prosthesis. American Rehabilitation, 10(3), 13-17.

This is an overview of how computers can and are being used to overcome the functional limitations of a handicapping condition. Disabilities that are examined include: 1) children without language, 2) adults with severe mobility limitations, 3) deaf-blind individuals, and 4) persons with severe sensory or motor impairments. The degree in which robotics will increase independence with regards to independent living and employment are discussed.

The author discusses issues that may interfere with the general acceptance of robotics. The concerns are personal control verses dehumanization, and the stigma of attached to the use of other worldly looking devises. Leaders in the rehabilitation community and the Federal Government opinions are also explored.

Ferrara, R. A., Brown, A. L., & Campione, J. C. (1986). Children's learning and transfer of inductive reasoning rules: Studies of proximal development. Child Development, 57, 1087-1099.

Intelligence-related differences in maintenance and transfer of strategy use were investigated. Groups of high-IQ and average-IQ children were trained on letter series problems. Maintenance and transfer were measured by the amount of instruction required to solve a problem. A strong relation existed between IQ and learning efficiency. Transfer was also realted to IQ, higher-IQ children requiring fewer prompts. Group differences increased as transfer distance increased.

Fine, S. A. (1974). Functional job analysis: An approach to a technology for manpower planning. Personnel Journal, November, 813-818.

This is a theoretical justification of FJA, the functional job analysis approach. The author proposed that the language used for task descriptions should be not only related to the end result of the task and the hardware involved, but should also be related to workers' behavior. The FJA controlled the task statement within the framework of WORKER ACTION + RESULT EXPECTED, including object of action, tools, equipment, work aids and instructions. Fine thought that when task statement is controlled in this way, then it is possible to develop performance standards and training requirements, and it also becomes possible to develop a task bank to store information for use.

Fischbein, D. S. (1984). The effect of group discussion on the modification of negative parental attitudes toward the mainstreaming of learning disabled children. Unpublished doctoral dissertation. New York University, New York.

Research indicates that parents of handicapped and nonhandicapped youngsters harbor specific negative views toward mainstreaming, resulting from their perceptions of the mainstreaming process and their children's needs. Negative parental attitudes may well undermine the success of the mainstreaming movement as their attitudes are transmitted to their offspring who are involved in various mainstreaming programs. Among the many paradigms utilized to promote attitude change, one of the most effective has been found to be the group discussion format. This study was designed to examine the effects of directed group discussions on the modification of the attitudes of those parents of learning disabled and non-handicapped children with the least

positive attitudes toward the mainstreaming of learning disabled students. Participants in this study were 144 middle and upper-middle class parents whose children attended private schools in the New York City area. An attitude questionnaire, Attitudes Toward Mainstreaming the Learning Disabled Scale (AMLDS), was revised from an attitude scale developed for a prior doctoral study (Evans, 1980) and was administered several months prior to and directly following the experimental treatments. Three treatment conditions were utilized: Relevant Discussion--a discussion related to issues involved in mainstreaming the learning disabled; No Discussion; and Irrelevant Discussion--a discussion related to traditional versus open classroom education. Subjects participated in groups of three in which two subjects held most positive and one subject least positive attitudes toward the mainstreaming of learning disabled children. It was found that in discussion groups in which the majority held most positive attitudes and the minority least positive attitudes toward mainstreaming learning disabled students, Relevant Discussion groups produced significantly greater attitude change than Irrelevant Discussion or No Discussion groups. No difference emerged, however, between Irrelevant Discussion and No Discussion groups. In addition, a positive correlation was found between the amount of positive information generated during Relevant group discussions and the extent of positive attitude change among all research participants. Finally, the balance of positive statements generated by the two most positive members of Relevant Discussion groups did not significantly affect the attitude change of minority members.

Ford, A., & Mirenda, P. (1984). Community instruction: A natural cues and corrections decision model. Journal of the Association for the Severely Handicapped, 9(2), 79-88.

In this paper, the authors presented a decision model purported to allow teachers to help more systematically those students who fail to respond to the relevant cues available in the community. Steps discussed include: arranging for students to respond to natural cues and correction, identifying errors, and determining the types of teaching and reinforcement procedures to use in a community environment.

Ford, J. K., & Wroten, S. P. (1984). Introducing new methods for conducting training evaluation and for linking training evaluation to program redesign. Personnel Psychology, 37, 651-665.

The objectives of the described project were 1) to determine the extent to which the training content domain is job related, and 2) to identify needed changes in training content to improve its job relatedness. Two separate studies were described. In the first, Lawshe's (1975) Content Validity Ratio (CVR) was used to establish the job relatedness of the content of the training program. Subject-matter experts rate each training KSAO (Knowledges, Skills, Abilities, and Other personal characteristics) on its importance for job

performance. For each KSAO, a CVR is calculated. The mean of the CVRs is the Content Validity Index (CVI). The second study is founded on the logic that training content should reflect those tasks that are most important to the job, most difficult to learn, and have the least possibility of being learned on the job. Training needs are prioritized by the information given by subject-matter experts. A methodology called the Matching Technique is used to link the training needs reassessment information to program revision. Considered a limitation of both studies is the large extent to which validity depends upon the judgments of subject-matter experts. Cordner (1980) cautions that such job analyses may serve to reinforce and legitimize the status quo.

Ford, L., Dineen, J., & Hall, J. (1984). Is there life after placement? Educational and Training of the Mentally Retarded, 19, 291-296.

The authors present the argument that follow-up services for vocational placement program graduates in job situations are necessary in order to maintain employment. Eighty-two mentally retarded adults who were trained and placed in competitive food service jobs by the Employment Training Program at the University of Washington since 1976 were followed. Four recommendations were made based upon findings: 1) the program must provide on the job training for individuals placed in competitive jobs; 2) provision needs to be made for long term follow-up services to insure maintenance; 3) support services need to be established; 4) changes need to be made so that a) financial support is available for long term vocational services; and b) agencies are reinforced for maintaining people in jobs, not just placing them.

Foss, G., & Peterson, S. L. (1981). Social-interpersonal skills relevant to job tenure for mentally retarded adults. Mental Retardation, 19(3), 103-106.

This article is to identify the social-interpersonal behavior areas most relevant to job tenure for mentally retarded adults. Respondents to a questionnaire designed to identify these behavior areas are G4 job placement personnel in sheltered workshops in 11 western states. Respondents to the questionnaire were asked to identify the five social-interpersonal behavior areas they felt were most relevant to job tenure. Three of the four areas identified almost relevant to job tenure for mentally retarded adults are concerned directly with the supervisor-worker relationship.

Fraas, C. J. (1986). Education of the handicapped updated 03/20/86. Issue brief prepared by Congressional Research Services, Education and Public Welfare Division. (Order Code for Issue Brief No. IB78040)

This report briefly examines four issues regarding the implementation of P.L. 94-142: 1) cost and responsibilities for educating all handicapped children; 2) the level of Federal funding; 3) handicapped children identified and served; and 4) implementation of P.L. 94-142 requirements.

Fraas-Jones, C. (1985). P.L. 94-142, The Education for All Handicapped Children Act: Its development, implementation, and current issues (Library of Congress Report No. 85-1031 EPW). Washington, DC: Congressional Research Service, Education and Public Welfare Division.

The report traces the development, legislative history, amendments, implementation and key issues of P.L.94-142. It provides a comparison of current services to those just prior to the enactment of the act. It concludes that the law is being effectively implemented, and it has the support of both the public and congress.

Frank, A. R., Wacker, D. P., Berg, W. K., & McMahon, C. M. (1985). Teaching selected microcomputer skills to retarded students via picture prompts. Journal of Applied Behavioral Analysis, 18(2), 179-185.

Researchers trained five children with mental retardation to access a micro computer by using picture prompts. All five subjects were able to run trained and untrained general programs. They were also able to retain this skill after a seven day period where the children were unable to access the computer. The authors conclude that this is an effective method of learning.

Frauenheim, J. G., & Heckerl, J. R. (1983). A longitudinal study of psychological and achievement test performance in severe dyslexic adults. Journal of Learning Disabilities, 16, 339-347.

This is a report on a follow-up evolution of 11 subjects with a mean age of 27 years at time of follow-up who were diagnosed approximately 17 years prior as being dyslexic. Academic and psychological tests were administered. Their academic problems persisted.

Freagon, S., & Rotatori, A. F. (1982). Comparing natural and artificial environments in training self-care skills to group home residents. The Journal of the Association for the Severely Handicapped, 7(3), 73-86.

This is a report of a study on the effects of training self-care skills to group home residents in natural settings and artificial settings. The sample consisted of 10 severely and profoundly handicapped youth living in two group homes. Eight of them were diagnosed as Down syndrome, while two were cerebral palsied. All ten have been institutionalized for at least 4 years preceding placement in group homes. The findings favored training in natural settings and at times when skills would normally be practiced. Implications and limitations were discussed.

Friedman, S. G., & Hofmeister, A. M. (1984). Matching technology to content and learners: A case study. Exceptional Children, 51(2), 130-134.

This paper discusses the advantages to special education instruction of combining technological and personal instruction. The authors contended that class size prohibits special education teachers from providing the individual attention required to meet the students needs. This problem is addressed by implementing a lessons programmed on computerized discs. The student is able to work independently. The computer checks progress, reviews material that is not comprehended, and contacts the teacher if the student has persistent problems.

Gabbert, B., Johnson, D. W., & Johnson, R. T. (1986). Cooperative learning, group-to-individual transfer, process gain, and the acquisition of cognitive reasoning strategies. The Journal of Psychology, 120, 265-278.

This study of 52 first grade students compared achievement of the individualistic and cooperative learning situations on tasks representing different levels on Bloom's taxonomy. Three types of achievement measures were measured: comparisons of group and individual productivity on academic tasks, of individual achievement on posttests, and of the level of reasoning strategy used to complete the tasks. Groups achieved more than individuals on all tasks, although on tests of missing addends the high and low individualistic learners were higher than the cooperative group as were the high individualistics on the story problem task.

Gael, S. (1977). Development of job task inventories and their use in job analysis research. JSAS Catalog of Selected Documents in Psychology, 7, 25.

Job task analysis is viewed as a potential component in an ongoing personnel management system, rather than just a method limited to a single objective or application. Out of many approaches to job task analysis and the documentation of the results, the author found that most methods share at least one common feature—a comprehensive list of tasks that comprise that job's activities. To Gael, the differences between the methods appear to be mainly in format and in the kind and amount of auxiliary data—such as task importance, task difficulty, task time, etc—requested about tasks. In this study, an approach to developing job inventory questionnaires by interviewing supervisors of job incumbents is described. An initial interview provides the bulk of the information from which task statements will be extracted. A verification interview is conducted with a different interviewee to check and modify information obtained in the initial interview and to uncover aspects of the work that may have been overlooked previously. A follow-up interview is conducted with the previous interviewees to review and modify a draft of the job inventory questionnaire. Applications of job task inventory questionnaires in studies of engineering, sales, and clerical jobs are described and summaries of study results are presented.

Gael, S. (1983). Job analysis: A guide to assessing work activities. San Francisco: Jossey-Bass.

This book provides a step-by-step "how to" guide to accomplishing job analysis from beginning to end, with minimal use of or reliance on consultants. It covers with its 8 chapters an assiduous review of the job analysis literature to the "how to" procedures of the whole process of job analysis.

Gaylord-Ross, R., Gaylord-Ross, C., Hagie, C., Musante, P., & Jameson, D. (1986). Considerations and outcomes in transitional, supported employment. San Pablo, CA: Richmond Unified School District.

A review and evaluation of the Employment Retention Program (ERP). The most significant one-year outcome of the program was that 18 of the 21 participants were employed successfully in competitive settings. Elements that affected the transition process and retention of employment were discussed. The 3 negative terminations were examined.

Gaylord-Ross, R. J., Haring, T. G., Breen, C., & Pitts-Conway, V. (1984). The training and generalization of social interaction skills with autistic youth. Journal of Applied Behavior Analysis, 17, 229-247.

Two experiments were conducted to increase the initiations and duration of social interactions between autistic and nonhandicapped youths. Experiment 1 taught two autistic youths to initiate and elaborate social interactions with three age-appropriate and commonly used leisure objects, a radio, a video game, and gum. The students were first taught to use the objects and subsequently instructed in the related social skills. The youths generalized these social responses to other non-handicapped peers in the same leisure setting. A second experiment trained a third autistic youth to emit similar social leisure skills. The use of the leisure objects and the related social skills were taught at the same time. The autistic youth learned these skills and generalized them to other handicapped peers in the same leisure setting. The importance of teaching generalized social responding in particular sub-environments was emphasized.

Gentillon, L. (1985). Annual report: Developmental Workshop, Inc (unpublished report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This report details the activities of Development Workshop, Inc. In coordination with Innovative Concepts, Inc. PWI-DWI plans on evaluating, training and placing 60 individuals with Developmental Disabilities into jobs within and associated with the plastic injection molding industry. A six-phase, competency-based, on-the-job training process is being used. The

report reflects a close working arrangement between the PWI and DDD. It also underscores the need for services by person with developmental disabilities.

Georgas, J. (1986). Cooperative, competitive, and individualistic goal structures with seventh-grade Greek children: Problem-solving effectiveness and group interactions. The Journal of Social Psychology, 126, 227-236.

In this study, 90 seventh-grade Greek students, split into 30 three-person groups, were compared for problem-solving effectiveness. Groups were divided by academic level (high, average, or low), sex, and goal structures (cooperative, competitive, and individual) although each child participated in all three goal structures. Results showed the high individual was more effective at problem-solving than under the cooperative and competitive goal structures. The low individual was less effective than under the cooperative and competitive goal structures while the average individual showed no significant differences with the cooperative or competitive goal structures. Academic grades did not interact with goal structures although low grades did result in lower problem-solving effectiveness.

Gerber, P. J. (1981). Learning disabilities and eligibility for vocational rehabilitation services: A chronology of events. Learning Disability Quarterly, 4, 422-425.

Historically, learning disabled (LD) individuals have been excluded from vocational rehabilitation services because of eligibility criteria that did not recognize learning disabilities as a mental or physical disability. Several significant events including the recognition of learning disabilities by the Diagnostic Statistical Manual III of the American Psychiatric Association, the World Health Organization's International Classification of Diseases, and the California Department of Rehabilitation created an atmosphere of acceptance in the rehabilitation community. After initial efforts to maintain the traditional posture towards learning disabilities in the rewriting of the Rehabilitation Comprehensive Services and Developmental Disabilities Amendments of 1978 (PL 95-602), the Rehabilitation Services Administration yielded to a new conceptualization which will allow the severely learning disabled (SLD) access to rehabilitation services.

Giangreco, M. (1983). Teaching basic photography skills to a severely handicapped young adult using simulated materials. Journal of the Association of the Severely Handicapped, 8, 43-49.

This study investigation examined acquisition, maintenance, and generalization aspects of teaching basic photography skills to a 20-year old severely mentally retarded male with Down's syndrome. Training occurred in a public school setting and at the learner's place of residence. Training procedures combined simulation, a least-to-most intrusive prompting hierarchy, basic reinforcement strategies, and a method of assisting the learner make the

connection between simulated and real materials. Within a multiple-probe design across four phases, the learner acquired and maintained the skills of loading film in a camera, using a flash attachment, deciding what to photograph, and taking a photograph. Generalization effects from simulated to real materials showed increasing co-variation as the program progressed. Implications of this study focus on the viability of photography as a potential hobby for severely handicapped individuals and on questions related to simulation and generalization effects.

Gick, M. L., & Holyoak, K. J. (1980). Analogical problem solving. Cognitive Psychology, 12, 306-355.

The use of an analogy from a semantically distant domain to guide the problem-solving process was investigated. Subjects were provided with a story analogy, describing a problem and its solution (the military problem), and then given a subsequent target problem that differed in surface format but had a common underlying solution (the radiation problem). Subjects transferred the solution when given a hint to use the first story.

Gill, D., & Langone, J. (1982). Enhancing the effectiveness of the IEP. Journal for Vocational Special Needs Education, 4, 9-11.

This article endeavors to establish guidelines and strategies for the joint development and subsequent implementation of the IEP's and relationship between special education and vocational education in this process. Three major topical areas are explored: key concepts, IEP developmentin vocational education, and IEP implementation strategies.

Gillespie, J. (1982). The pushouts: Academic skills and learning disabilities in continuation high school students. Journal of Learning Disabilities, 15, 539-540.

Although students from California high schools are sent to continuation schools primarily because of attendance and behavior problems, assessment measures suggested that many are learning disabled. The schools tend to provide the type of programs to benefit LD students.

Gold, M. (1972). Stimulus factors in skill training of retarded adolescents on a complex assembly task: Acquisition, transfer, and retention. American Journal of Mental Deficiency, 76, 517-526.

64 Moderately and severely retarded individuals enrolled in 4 sheltered workshops, learned to assemble a 15-piece bicycle brake and were then tested for transfer to a 24-piece bicycle brake. 52 of the subjects were retested on both tasks after 1 year. One-half of the subjects worked with the parts of the training task brake with form-only. The others worked with parts that were color-coded. The results showed that the manipulation of stimulus

variables could achieve rapid and effective training. The addition of a color cue to a task that did not already have one made the task much easier to learn. The study also showed that the use of color, as a cue redundancy with form, does not inhibit transfer to a form-only task when overlearning is given. (overlearning has been defined in the present study as 20 trials beyond criterion). The 1-year retention study produced dramatic retention effects.

Gold, M. W. (1973). Factors affecting production by the retarded: Base rate. Mental Retardation, 11, 41-45.

Participants of this study were 20 individuals enrolled in three sheltered workshops. They were trained to work either 1 or 3 hours per day for 10 days, under a no-external reinforcement condition, assembled a 14 piece bicycle brake. Mean production for the 1-hour group was 24.9 units per hour per person and for the 3-hour group, 20.2 units per hour per person. Error rate was very low for both groups. This study concluded that the mentally retarded are capable of producing, qualitatively and quantitatively, at a level far above what is presently found. The current trend toward an emphasis on incentive systems was questioned.

Goldberg, S. S. (1986). Reimbursing parents for unilateral placements in private special education schools. Exceptional Children, 52, 390-394.

When parents placed their child in a private special education program without school district approval, two legal questions arose: Does Public Law 94-142 prevent parents from taking unilateral action? May they be reimbursed for private program? In Burlington, the U.S. Supreme Court held that the law does not bar parents from making unilateral placements, but they may be reimbursed only if the private educational program is eventually approved through the appeal procedures set forth in the law.

Goodall, P., & Bruder, M. (1986). Parent and the transition process. The Exceptional Parent, 16(2), 22-28.

This article is to define parents' role in the transition process of students with disabilities from school to the adult community and the world of work. 1) transition education will become a part of school systems' regular parent education programs, so that parents will be introduced to transition issues during a child's elementary school years, 2) parents are the greatest resource in helping to develop their child's employment potential, 3) parents are the ultimate advocates and case managers for their children, they are the one constant in a lifetime of changing services and providers, 4) armed with information about employment and employment training alternatives in the community, parents will be able to participate knowledgeably in planning for the transition of their young adult, 5) parents' full participation in the transition process is crucial because they know their child better than anyone else and have the most insight and information about their child's abilities

and limitations, 6) parents can provide the unique perspective which is invaluable in arriving at short and long-term goals.

Governors Committee on the Employment of the Handicapped. (1985). A guide to disabled student services at colleges, community colleges and vocational institutes in the State of Washington (unpublished manual). In Student guide to services compiled from a 1985 survey of service providers. Olympia, WA: Office of the Governor.

This manual summarizes post secondary services for person with disabilities in Washington State. Information for this manual was derived from a 1985 survey of all service providers in the state. Questions of number of stuents being served, type of handicapping condition, staff level, services provided and accessability are addressed. The data set from the survey is currently being compiled on a microcomputer. We will have access to this data.

Gow, L., & Ward, J. (1984). The use of photographs as stimulus materials in programming for generalization with mentally retarded persons. Australia and New Zealand Journal of Developmental Disabilities, 10, 69-79.

In order to examine the relative effects of using photographs and actual objects in training for generalization, a group of severely-moderately retarded adults was taught a simple industrial type task. Subjects were randomly assigned to one of four equal groups: A(objects only), B(photographs only), C(objects and photographs), D(conventional teaching through modeling). It was found that, with respect to the initial learning, generalization and maintenance stages, the use of photographs as stimulus materials produced inferior results to those obtained from using actual objects or conventional teaching.

Greenspan, S., & Schoultz, B. (1981). Why mentally retarded adults lose their jobs: Social competence as a factor in work adjustment. Applied Research in Mental Retardation, 2, 23-38.

The authors sought to determine the primary reason for involuntary termination from competitive employment of mildly and moderately mentally retarded individuals. Thirty subjects were clients of a community based residential, vocational, and counseling/advocacy services agency, had been competitively employed and involutarily terminated, were 23 to 59 years old, and had IQs ranging from 45 to 77. An empirically influenced model of social competence was developed which utilized six coding variables. Assignment of subjects to a coding category was based upon (1) client records, (2) interviews with caseworkers and job placement staff, and (3) phone interviews with former employers. Seventeen of the 30 subjects lost their jobs primarily for social reasons, 13 for nonsocial reasons. Results were not statistically significant. The authors, nevertheless, conclude that social competence,

particularly social awareness, may be an important contributor to the involuntary job terminations of mentally retarded individuals.

Gruenhagen, K. A. (1982). Attitudes of fast food restaurant managers towards hiring the mentally retarded. Career Development for Exceptional Individuals, 5(2), 98-105.

The author sought to discover whether employers' attitudes toward mentally retarded workers became more positive as the employers' level of prior experience with such workers increased. Managers of fast food restaurants, representing 12 restaurant chains, two restaurants from each chain, were selected. A Likert type scale questionnaire was designed which measured level of prior experience with mentally retarded people, opinions as to optimal placement of mentally retarded people in society, and attitudes toward hiring such people. A statistically significant correlation between prior experience and attitudes toward hiring was discovered. Other correlations were not significant. Managers identified as desirable qualities for employees personality and appearance, not experience, speed, or other general abilities. The author suggests that (1) employers have more exposure to mentally retarded student workers and (2) schools emphasize those qualities that managers deem important for employment.

Guba, E. G. (1984). The effect of definition of policy on the nature and outcomes of policy analysis. Educational Leadership, 42, 63-70.

Guba presents a taxonomy of policy in relation to education and includes three major types: Type 1, policy as an expression of intent; Type 2, policy as an expression of actions; and Type 3, policy as an expression of impact. Type 1 policies include (a) the assertion of goals, (b) policy intent reflected by standing decisions, (c) policy reflected as a guide to discretionary action, and (d) policy expressed through a problem-solving strategy. Type 2 policy examples include policy reflected through authoritative behavior, norms for the conduct of services, or the output of direct policy-making systems. With Type 3, the emphasis is on what happens to the consumers of services related to policy, i.e., what is perceived by them as policy.

Guess, D., Benson, H. A., & Siegel-Causey E. (1985). Concepts and issues related to the choice making and autonomy among persons with severe disabilities. Journal of the Association for the Severely Handicapped, 10, 79-86.

This paper discusses issues related to concepts of preferences and choice-making among persons with severe disabilities. Included are suggestions for: a) acknowledging preferences - from an educational perspective, it is important that caregivers and teachers recognize the exhibition of preferences through modes of communication that may or may not include talking, such as body movements, facial expression, gestures, etc. These preferences can be

built into patterns of interaction that incorporate choice across a variety of daily routines and interactions; b) teaching choice as a decision-making process. This process is especially useful with individuals who have limited response repertoires and/or who have not yet developed the ability to make choices. Choice - involves the expression of preference; c) choice making as an experience of personal autonomy and dignity.

Habeck, R. V. (Ed.). (1985). Economics and equity in employment of people with disabilities: International policies and practices: Proceedings from the symposium. East Lansing, MI: Michigan State University. (ERIC Document Reproduction Service No. ED 261 209)

Included in this volume are descriptions and reviews of policies and programs for employment of handicapped people in several Western European countries and in Japan. Issues of concern are cooperation of the private and public sectors to achieve employment goals for disabled people, transition of youth from school to work, assessment, incentives, etc.

Hallahan, D. P., Marshall, K. J., & Lloyed, J. W. (1981). Self-recording during group instruction: Effects on attention to task. Learning Disability Quarterly, 4, 407-413.

The effects of self-monitoring on attention to task during small-group instruction were investigated. Three learning disabled boys with severe attentional problems were taught to self-monitor their on-task behavior while participation in oral reading tasks. An ABABCD design demonstrated marked increases in attention to task for all three students. The results indicate that self-monitoring procedures can be effectively employed during oral, small group instruction, and that positive behavioral changes can be maintained over a period of time following the gradual fading of external, procedural components. Self-recording method - the teacher gave the three students wrist counters and placed a tape recorder behind them. She played a tape which emitted tones at random intervals. The tones were approximately two seconds long, with about 45-second (range: 10 to 90 seconds) intervals between tones. The teacher instructed the students to ask themselves the question, was I paying attention? at the sound of each tone. If they judged themselves to be on task they were to press a wrist counter button and continue with the lesson. If they thought they were not on task, they were to do nothing.

Halpern, A. (1985). Transition: A look at the foundations. Exceptional Children, 51, 479-486.

Halpern reviews the policy that has been articulated by OSERS and summarizes a recently completed study on the status of secondary special education in Oregon. He creates a three-dimensional revised transition model which considers the goals of residential environment, employment, and social and

interpersonal networks. Success in any one of the three areas does not necessarily mean success will occur in any of the others.

Halpern, A. (1986). Characteristics of a quality program (unpublished manuscript). Eugene, OR: University of Oregon.

This manuscript describes the results of a survey completed for the Oregon Department of Education and proposes a set of standards by which the characteristics of quality in a program may be determined. The survey yielded information from school district administrators, special education teachers, and high school programs regarding the status of secondary special education programs, the gaps that exist in the programs, and the areas of greatest need for improvement in those programs. Major findings were that (1) there is a discrepancy between reports of secondary curriculum that is available as compared to the extent to which it is considered utilitized by special education students; (2) there is concern regarding the lack of coordination between special education and regular or vocational education; (3) transition of activities lack coordination and follow-up or follow-along studies as well as parent involvement; and (4) there is concern regarding the lack of school documentation of efforts and accomplishments. Forty-seven standards, written as desirable characteristics, have been included as guidelines in the manuscripts.

Halpern, A. J., & Benz, M. R. (1984). Toward excellence in secondary special education: A statewide study of Oregon's high school programs for students with mild disabilities. Unpublished manuscript.

This is a report of the findings of a 1984 survey of 157 administrators, 411 teachers and 677 parents of students receiving special education. The report includes findings of representatives of the state on academic instruction, vocational opportunities, and transition services. Teachers, parents and administrators all express the need for increased accessibility to vocational programs. The survey shows that students with handicapping conditions are most likely to have access to training toward clerical and sales positions. The study indicates that there is resistance to providing vocational services to students with handicapping conditions. Forty-one percent of the districts operate programs which allow work experience for students with disabilities. Sixty percent of administrators verses 29% of the special education teachers perceived the special education teacher as most responsible for coordinating vocational services. All three respondents feel that transition services are important and should be expanded. Of the 170 districts, 124 use informal agreements, 35% of the districts keep follow-up data on graduates, and vocational rehabilitation agencies are most frequently contacted.

Halpern, A. S. (1973). General unemployment and vocational opportunities for EMR individuals. American Journal of Mental Deficiency, 78(2), 123-127.

Data from two broadly based studies concerning vocational adjustment of educable retarded persons were examined with respect to the presumed inverse relationship between adverse community economic conditions and employment opportunities for retarded workers. The data suggested that retarded persons were not automatically the losers during times of economic hardship. Mentally retarded individuals were assisted by well-structured vocational training programs were found to have a good chance in locating jobs regardless of the level of general community unemployment.

Hanley-Maxwell, C., Rusch, F., Chadsey-Rusch, J., & Renzaglia, A. (1986). Reported factors contributing to job terminations of individuals with severe disabilities. Journal of the Association of the Severely Handicapped, 11(1), 45-52.

The study examined factors reported to contribute to job termination of adults with disabilities. 51 terminations were investigated utilizing three job termination categories. The most frequently reported causes for job loss were problems in the areas of character and/or production. Social awareness, character, and/or production accounted for more than 80% of all terminations. Results indicated that the majority of job terminations were due to reasons classified as social reasons, and when production problems were reported, the presence of social problems was associated with a greater likelihood of job termination.

Hardin, E. (1967). Job satisfaction and the desire for change. Journal of Applied Psychology, 51(1), 20-27.

The paper tests the theory of employee desire for specific changes: the employee will consider 1) how well off would he be in the potential state of affairs compared with his current state of affairs and 2) what challenges and dangers or nuisances would be involved in the change. Three concepts (1. desire for change; 2. level of satisfaction; and 3. readiness for change) were evaluated for each of 199 subjects. The researchers concluded that 1) the general but passive readiness for change affects the frequency of desire for specific changes that may be expected at any given level of job satisfaction and 2) the desire for specific changes in job aspects is governed not only by the discrepancy between the attractiveness of existing and potential job characteristics but also by the person's assessment of the very process of change.

Harkins, S. G. & Jackson, J. M. (1985). The role of evaluation in eliminating social loafing. Personality and Social Psychology Bulletin, 11, 457-465.

In this "brainstorming" study, social loafing was observed. Identifiability was not, in itself, sufficient to reduce social loafing. To reduce loafing, it was necessary to have both identification and a standard for evaluation. The study involved 160 undergrads in four person groups.

Harkins, S. G., Latane, B., & Williams, K. (1980). Social loafing: Allocating effort or taking it easy? Journal of Experimental Social Psychology, 16, 457-465.

In this study of 48 male and 48 female undergrads in a clapping study of four member groups, results favored a "minimizing" rather than an "allocating" hypothesis. It appears that "getting by" was the primary cause of social loafing. They raise the question as to the nature of the task. This task was both boring and tiring, plus, there was no compensation. This may suggest that use of cooperative learning is not appropriate for drill tasks.

Harkins, S. G., & Petty, R. E. (1982). Effects of task difficulty and task uniqueness on social loafing. Journal of Personality and Social Psychology, 43, 1214-1229.

Prior social loafing studies suggest that identifiability was a major way to reduce loafing. In this pair of studies, one with 64 and the other with 122 undergrads, they identified two other mechanisms to reduce loafing. If a task was seen as challenging, loafing was reduced whether identified or not. Also, if the contribution of the individual was unique and not redundant, loafing was reduced. An excellent article.

Harvey, R. J. (1986a). Monte Carlo baselines for interrater reliability correlations using the Position Analysis Questionnaire. Personnel Psychology, 39, 345-357.

This is a study addressing the controversial issue in job analysis, namely, the validity and the reliability of the ratings of expert job analysis raters vs. naive-raters. Some authors, e.g. Jones, Main, Butler, and Johnson (1982) advocated reducing the cost and intrusiveness of the job analysis process by using raters other than trained job analysis experts. Some supportive studies argued that such nontraditional analysis, for many purposes, provided results that are functionally equivalent to traditonal, time- and labor-intensive methods like interviews and direct observation. But the researchers of this study argued against this conclusion by showing that reliabilities in the .50 range (such as were reported in recent nontraditional PAQ studies) can be obtained when raters ruled out only 15-20% of the items as DNA and respond randomly to the remainder. Thus the researchers provided evidence against the

use of untrained or relatively job-naive raters to complete the PAQ in actual job analysis applications.

Harvey, R. J. (1986b). Quantitative approaches to job classification: A review and critique. Personnel Psychology, 39, 267-289.

A review of literature on job classification decisions. The author addresses the topic of selecting among and using the numerous quantitative job-classification procedures, with a focus on the decision-making tasks and practical difficulties that confront users of each. The numerous quantitative techniques were divided into largely two catagories: the inferential and the descriptive. Among the first, the author found, the hierarchical cluster analysis (HCA) approach advocated by Mobley and Ramsay (1973) is one of the most widely used job-classification methods, while among the latter ANOVA received much attention in the literature. After listing and analyzing the strengths and drawbacks of each technique, the author claimed that it seemed reasonable to conclude that the purpose for making job-similarity decisions should be the guiding force behind the selection of a quantitative technique for job classification.

Hasazi, S. B. (1985). Facilitating transition from high school: Policies and practices. American Rehabilitation, 11(3), 9-11.

This paper gives an introduction, for both school educators and and collaborating agency staff, to several policies and related practices for program organization, curriculum, and vocational experiences in the transition process. Policies and practices mentioned are LIA (local interagency agreements), IEPs, Carl D. Perkins Law of 1984, PL 98-199, curriculum planning, vocational training programs, and follow-up studies.

Hasazi, S., Gordon, L., & Roe, C. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979 to 1983. Exceptional Children, 51, 455-469.

This survey study examined a variety of demographic and educational factors associated with the employment status of 462 youths exiting both rural and urban Vermont schools. Subjects represented a variety of special education categories. Subjects primarily occupied non-subsidized job for less than full-time hours and which they had found by themselves or through family or friends. Service, clerical, and agricultural jobs predominated. Several factors with differential associations with employment included residential location, gender, manner of exit from high school, and previous employment experience.

Hasazi, S. B., Gordon, L. R., Roe, C. A., Hull, M., Finck, K., & Salembier, G. (1985). A statewide follow-up on post high school employment and residential status of students labeled mentally retarded. Education and Training of the Mentally Retarded, 20, 222-234.

This study investigated the employment and residential status of 243 mentally retarded youths who had exited (graduated, dropped, or left) high school in Vermont between 1981 and 1983. The sample consisted of youths from all 17 regional special class programs for mentally retarded secondary students in Vermont. Of the 243 youths meeting these criteria, exit data were obtained for 242, with 150 graduated, 140 left, and 50 dropped. 209 students were labeled EMR, 25 were labeled TMR, and 9 were unspecified. Gender was specified for 240 students, with 145 males and 95 females in the sample. Information was solicited from school records and through telephone interviews and included vocational training history, employment history, social service utilization, and residential and marital status. Type of vocational education received during high school was not specified, though type of agency utilized in pursuit of employment was. Type of jobs (competitive, subsidized, or sheltered) presently held was determined, as were hours worked and rate of pay (greater or less than minimum wage). Status of independent living conditions was not directly addressed. Results indicated that certain vocational and educational experiences during high school were related to employment status and salary level following high school; that employment rates remained stable across rural, urban, and metropolitan areas; and that the majority of employed youths found their jobs though their self-family-friend network. The findings were compared with those of an earlier study of a cross-categorical sample of handicapped youth.

Hastings, L., Hill, T., & Kindinger, M. (1983). Vocational preparation: Training students to be workers. Facilitating transition from the classroom to the work setting. The Journal for Vocational Special Needs Education, 6(1), 12-14.

A program model was offered to enable the vocational special education teacher to develop individual students' skills and general work habits and their ability to transfer these skills and habits to different job situations. Lists of work habits essential to job success and behaviors associated with differentiated supervision styles were developed and integrated in the programmed activities. Key steps were suggested.

Hawkins, J. A. (1984). Follow-up study of special education graduates: Class of 1983. Rockville, MD: Montgomery County Public Schools, Department of Educational Accountability. (ERIC Document Reproduction Service No. Ed 256 786)

The study was initiated to find out what had happened to 1983 Montgomery County Public School (Rockwille, Md.) special education graduates. Specifically

investigated were student, parent, and employer perceptions of the adequacy of preparation of the graduates from special education schools. Subjects were 92 MCPS graduates; 48 parents; and 36 employers, representing 73% of the 1982-83 special education graduates. (Mildly retarded = 23; multiply handicapped = 22; emotionally impaired = 53; LD = 65; hearing impaired = 10; and orthropedically impaired = 6.) They responded to a telephone survey. 47% of the graduates were working either full or part time. 80% of the employers were highly satisfied or satisfied with the graduates as employees. More than 50% of the employers said that there was room for promotion for their employees. The most negative reaction was from parents: 34% of the parents responded that preparation for employment was poor/very poor because of lack of development of job skills and of prior training experiences.

Hayes, J., & Higgins, S. T. (1978). Issues regarding the IEP: Teachers on the front line. Exceptional Children, 44, 267-273.

This paper provides necessary information for teachers on the front line who are IEP developers. Several issues are raised, such as federal IEP requirements, least restrictive environment, personal development, etc. A list of possible resources is provided.

Hayes, S., Rosenfarb, I., Wulfert, E., Munt, E., Korn, Z., & Zettle, R. (1985). Self-reinforcement effects: An artifact of social standards setting? Journal of Applied Behavior Analysis, 18, 201-214.

Two studies were conducted to identify mechanisms responsible for observed self-reinforcement effects. In Experiment 1, using a studying task, self-reinforcement procedures did not work when they were private, but did work when they were public. Self-delivery of consequences added nothing to the effectiveness of the procedure. The data suggested that public goal setting was the critical element in the procedure's effectiveness. In Experiment 2, an applied extension, goal setting alone was effective in modifying over a long period studying behaviors of people with significant studying difficulties, but only when the goals were known to others. Overall, the two experiments make more plausible the view that self-reinforcement procedures work by setting a socially available standard against which performance can be evaluated. The procedure itself functions as a discriminative stimulus for stringent or lenient contingencies. The application of this mechanism to other problems of applied significance is briefly discussed.

Hayward, B. J., Reisner, E. R., Tashjian, M. J., & Lablanc, L. A. (1986). Evaluation of the Projects With Industry (PWI) program (Contract Number 300-84-0207). Washington, D.C.: Rehabilitation Services Administration, Department of Education.

This report reviews the 1984 status of PWIs with regard to oversight, numbers and types of persons with handicapping conditions receiving services, types of

assistance provided, source of funding, changes in the employment status and earning power of clients after placement, collaborations and cooperative agreements with other agencies, and a comparison with PWI activities in prior years. The report concludes that in general, PWI projects are experiencing success in their effort to assist persons with severe handicapping conditions obtain competitive employment. It sights the relative low cost of placement, high rate of employer satisfaction and the fact that many PWI participants are successfully making the transition to stable employment in support of its contention. The report goes on to recommend a need to change three areas. (1) A need to improve the distribution of PWI projects around the country, (2) the need to adopt procedures that would permit the assessment of individual projects and the program as a whole, and (3) a need to clarify administrative ambiguity, including the status of PWIs as a service or demonstration program.

Heal, L. W., Colson, L., & Gross, J. C. (1984). A true experiment evaluating adult skill training for severely mentally retarded secondary students. American Journal of Mental Deficiency, 89(2), 146-155.

The purpose of the present study was to examine the effectiveness of a community-based training program using a curriculum employing a) an ecological inventory strategy to select instructional content, b) task analysis of skills into teachable units, c) prescribed teaching methods to standardize error-correction procedures, and d) data-based instruction to verify student performance empirically. 35 secondary-level severely mentally retarded students were assessed on functional community and living skills. The evaluation of student performance on specific skills was done using random assignment to training and control conditions in a cross-over design. Students showed significantly greater gains on those tasks for which they were trained than on those for which they were not. In addition to this specific skill training, a daily checklist showed significant progress by all students on a broad array of skill sequences.

Hearing before the Committee on Labor and Human Resources. (1983). Rehabilitation Amendments of 1983. (ERIC Document Reproduction Service No. ED 249 754)

Hearing to revise and extend the Rehabilitation Act of 1973 and to extend the developmental disability assistance and Bill of Rights Act, and for other purposes. Midvale, UT. Congress of the U.S., Washington, D.C. Senate Committee on Labor and Human Resources. Statements address budgetary aspects of the amendments, eligibility changes, accountability, and creation of a separate client assistance program.

Hearings before the Subcommittee on Post-secondary Education. (1982). Guaranteed Student Loan and Civil Rights Enforcement (Report No. 1t341-36).

Hearings before the Subcommittee on Post-secondary Education to examine the implications of Administration efforts to exempt private educational institutions enrolling Guaranteed Student Loan (GSL) Program participants from Civil Rights Act of 1964 Title VI, Education Amendments of 1972 Title IX, and Rehabilitation Act of 1973 Section 504 requirements prohibiting sex, race, of handicap discrimination at federally assisted institutions. Focuses on issues raised by the Department of Education and the Department of Justice responses (related court doc, p. 96-140) to 1980 U.S. District court decision in Grove City College v. Bell.

Hearings before the Subcommittee on the Handicapped of the Committee on Labor and Human Resources, U.S. Senate. (1983). Oversight of the Vocational Rehabilitation Act and the Education of the Handicapped Act (Report No. 5541-47).

Hearing before the Subcommittee on Handicapped to consider extension and revision of Department of Education, vocational rehabilitation and placement programs under the Vocational Rehabilitation Act and the Rehabilitation Act of 1973.

Hearing before the Subcommittee on Select Education of the Committee on Education and Labor. (1984). Oversight and Reauthorization Hearing on the Rehabilitation Act of 1973. (ERIC Document Reproduction No. ED 249 748)

Statements touch on amendments to the Rehabilitation Act of 1973, provisions for independent living, rehabilitation research, and rehabilitation training.

Hill, B. K., Lakin, K. C., & Bruininks, R. H. (1984). Trends in residential services for people who are mentally retarded: 1977-1982. The Journal of the Association of the Severely Handicapped, 9, 243-250.

Based on the 1977 data and 1982 national survey, this study described and discussed the new trends in residential care for mentally retarded people. Findings included: (1) there was no significant change in the overall size of the residential service system, and (2) while numbers of residents remained stable, the total number of facilities increased substantially from 11,025 to 15,633. These and other changes indicated that the residential service system tended to be more community-based, and more federal and state attention was directed toward it.

Hill, M., & Wehman, P. (1979). Employers and nonhandicapped co-worker perceptions of moderately and severely retarded workers. Journal of Contemporary Business, 8, 98-102.

This study reported from a survey distributed to employers, supervisors, and a representative sample of co-workers who work with approximately 25 moderately and severely mentally retarded workers. The IQ of the group ranged from 20-51. The disabled workers are competitively employed largely in food-service positions and through the assistance of an on-the-job training program. The items on the survey were designed to survey co-workers' perceptions of the clients' work competence, social acceptability, job satisfaction, dependability, and safely risk. The results showed that these nonhandicapped co-workers and supervisors reported positive perceptions of the handicapped workers. The responses provided an important social validation of the on-task behavior, low rate of absenteeism, and increased independence of the workers.

Hill, M., & Wehman, P. (1983). Cost benefit analysis of placing moderately and severely handicapped individuals into competitive employment. Journal of the Association for the Severely Handicapped, 8, 30-38.

Intending to expand the literature and establish a cost basis for a trainer-advocacy intervention model, the authors analyzed a job training and placement program established in 1978 for moderately and severely handicapped individuals. The subject pool was the 90 such handicapped persons who were placed into 123 positions in competitive employment by Project Employability from September, 1978, through August, 1982. Twelve principal factors were identified as crucial in determining costs and benefits associated with job placement of moderately and severely handicapped persons. Evidence was found that financial benefits outweigh costs in job placement. Savings from this program were calculated to be $90,376.

Hill, M. L., Banks, P. D., Handrich, R. R., Wehman, P. H., Hill, J. W., & Shafer, M. S. (1987). Benefit-cost analysis of supported competitive employment for persons with mental retardation. Research in Developmental Disabilities, 8(1), 71-89.

The authors discuss benefit and cost (1) from the prespective of the person with severe disabilities and receiving supported competitive employment services and (2) from the perspective of the taxpayer. The average annual increase in income for disabled persons receiving employment services from the Rehabilitation Research and Training Center was $3,894. The average annual savings to governmental agencies for each person served was $4,063. For the taxpayer/government, for every $1.00 expended, $1.87 was accumulated in benefits. For the person served, for every $1.00 relinquished, $1.97 was received in increased income.

Horn, W. F., O'Donnell, J. P., & Vitulano, L. A. (1983). Long-term follow-up studies of learning-disabled persons. Journal of Learning Disabilities, 16, 542-555.

This article reviews 24 follow-up studies of LD persons,and points out the confusions and contradictions in the literature. The methodological problems are discussed with suggestions for future research.

Horner, R., Jones, D., & Williams, J. (1985). A functional approach to teaching generalized street crossing. Journal of the Association of the Severely Handicapped, 10, 71-78.

This study examined the effects of general case instruction for teaching street crossing to individuals with moderate and severe mental retardation. Three dependent variables were assessed within a multiple baseline probe design across subjects. The first measure was performance across a group of 20 non-trained streets systematically selected to represent the range of street crossing situations encountered in the subjects' home towns. The second dependent variable was performance across 200 additional non-trained streets selected individually for each subject by parents or guardians as particularly relevant in the subject's daily life. The third dependent variable was the number of training trials to criterion. Two subjects completed training with the third serving as a no-treatment control. Results support the effectiveness and efficiency of general case instruction for teaching subject to cross non-trained streets.

Horner, R. H., & McDonald, R. S. (1982). Comparison of single and general case instruction in teaching a generalized vocational skill. Journal of the Association of the Severely Handicapped, 8, 7-20.

The relative effectiveness of two instructional strategies for teaching the crimping/cutting of biaxial electronic capacities was investigated. For severely handicapped high school students were trained to crimp/cut biaxial capacitors using first a single instance training strategy, then a general case training strategy. The results indicate a) that crimping/cutting of biaxial electronic capacitors is a generalized vocational skill that can be acquired by severely handicapped students, b) that general case training is a more effective strategy than single instance training when teaching for performance across non-trained examples, and c) that errors following single instance training are functionally related to the restricted range of training stimuli the student encounters in a single instance training format. Implications for educational programming with severely handicapped students in school, work, and community settings are discussed.

Howe, B. (1982). A language skills program for secondary LD students. Journal of Learning Disabilities, 15, 541-544.

A description and evaluation of a program designed to increase receptive and expressive language skills of secondary LD students. The article presents data on 31 mildly handicapped (mostly LD) students.

Hudson, F. G., & Graham, S. (1978). An approach to operationalizing the I.E.P. Learning Disability Quarterly, 1, 13-32.

A step-by-step guide to help special education teachers in their planning and implementing of I.E.P.'s. Steps listed are: establishing present level of performance, establishing priorities, delivery of services, evaluation, and implementation. Sample I.E.P. forms were presented.

Huges, P., et al. (1986). Unrealized promises ensuring the educational rights of deaf/hard of hearing youth. Report from the Work Group on Education of Deaf/Hard of Hearing Youth - Governors Committee on the Employment of the Handicapped, 1-44. Olympia, WA: Office of the Governor.

This report addresses the impact of present education laws on deaf/hard of hearing children in Washington State. The issue discussed include definition of least restrictive environment; early intervention; birth to age five; assessment and evaluation; need for adequate and appropriate support services; the family's role; and critical needs in today's deaf child. The need for adequate resources and technologies is also discussed. Recommendations for public school districts and the state school for the deaf are made. Recommendations for Public School include; inservice training on special education law and 504 for school personnel, improve awareness of available resources, and increase awareness of different educational models. Recommendation for the State School for the Deaf include; responsibility for coordination State efforts to identify children who are deaf/hard of hearing, become a Statewide resource center, provide technical assistance to local educational authorities, focus educational programs to meet the individual needs of the students, work with OSPI and LEA's to monitor all educational programs for deaf/hard of hearing students, and restructure their own organization to assure that programs are developed the comply with P.L. 92-142, and meet the individual needs of their students.

Hull, J. T., & Thompson, J. C. (1980). Predicting adaptive functioning of mentally retarded persons in community settings. American Journal of Mental Deficiency, 85, 253-261.

The problem this study attempted to explore was the impact of various individual, residential, and community characteristics on adaptive functioning of retarded persons. The subject pool consisted of 369 persons residing in 144 of the 188 special residential facilities in Manitoba. IQ scors ranged

from the 20s to over 90 (median = 54). Multiple-regression analysis was run on the data; results showed a variety of individual characteristics to be related to the adaptive functioning level of retarded persons, e.g., IQ was found to be a powerful indicator, as were degree of satisfaction with current residential arrangements. Difficulty of generalization and limitations were discussed.

Humes, C. W., & Hohenshil, T. A. (1985). Career development and career education for handicapped students: A re-examination. The Vocational Guidance Quarterly, 34(1), 31-40.

In this article, the authors try to establish a firmer connection between career education and career development and show ways that these two concepts can help students make the transition from school to a career objective. New directions in policy and programming: 1) career education must be evaluated, 2) greater parent involvement, 3) staff development efforts must be intensified, 4) continued contact is needed with postschool settings, 5) career education must be included at all levels, 6) dissemination of information is essential.

Hunter, P. N., & Zuger, R. R. (1979). Easing the transition from school to work for students with severe physical disabilities: A summer work experience. Rehabilitation Literature, 40, 298-304.

In 1974, the Placement and Job Development Department at the Institute of Rehabilitation Medicine in New York designed and implemented an on-going summer employment program in the private sector. The intent of the program was to provide severely physically disabled high school and college students with meaningful paid work experiences, and the opportunity for integration into the normal work environment, as well as to skills, work habits, and knowledge of jobs. Pilot study findings supported informal evidence that the program affected the vocational development of the participants. Among the findings seen as the most important and significant by the authors was the participants' greater confidence in their vocational abilities.

Hupp, S. (1986). Effects of stimulus mode on the acquisition, transfer, and generalization of categories by severely mentally retarded children and adolescents. American Journal of Mental Deficiency, 90, 579-587.

This study was designed to investigate the differential effects of objects and photograph training on comprehension of category labels by severely mentally retarded children. Relatively simple tasks (acquisition of trained examples and transfer between modes) and relatively difficult tasks (generalization to novel examples in the training mode and in the other mode) were both included. Results indicated that acquisition and transfer did not differ, yet generalization was significantly more accurate with objects that with

photographs. Furthermore, generalization was significantly above chance for objects but not for photographs.

Hupp, S. C., & Mervis, C. B. (1981). Development of generalized concepts by severely handicapped students. Journal of the Association of the Severely Handicapped, 6, 15-20.

This paper addresses the issue of the development of object concepts by severely handicapped children. A strategy was designed to increase the probability that students would form generalized concepts. It was based on the results of research undertaken within the framework of the support of the best example theory of categorization. Teaching with good examples resulted in generalization above chance levels, while teaching with both good and poor examples did not lead to generalization above chance levels. In addition, the use of three good examples in teaching resulted in significantly more accurate generalization than the use of only one good example. Based on these results, modification of currently used strategies for promoting generalization are suggested, and implications for the preparation of educational program by teachers are presented.

Idol-Maestas, L. (1981). Increasing the oral reading performance of a learning disabled adult. Learning Disabilities Quarterly, 4, 294-301.

This research project was designed to increase a male adult's oral reading performance. A direct approach was used to teach phonic skills previously determined through a detailed performance analysis. As a result of highly specific phonic lessons, reading performance was increased by three years over a three-month period. A multiple-baseline design was used to compare acquisition and maintenance of each phonic concept.

Ingham, A. G., Levinger, G., Graves, J., & Peckham, V. (1974). The Ringelmann Effect: Studies of group size and group performance. Journal of Experimental Social Psychology, 10, 371-384.

This was a study of the "Ringelmann" effect, i.e., the tendency of individual performance to fall off when in a group situation. In study one, the 102 male undergrads did loaf on the classic rope pulling task. Size of group was involved as demonstrated in study two of 36 male undergrads. Addition of a second or third person reduced effort but there was no additional loss with the third to sixth members.

Irvin, L. (1976). General utility of easy-to-hard discrimination training procedures with the severely retarded. Education and Training of the Mentally Retarded, 11, 247-250.

This study was designed to investigate the application of easy-to-hard procedures for teaching a difficult visual discrimination in an assembly task

to severely retarded individuals. 24 adults were selected from a population of approximately 150 severely retarded residents of a state hospital. I.Q.'s ranged from 15 to 39. Chronological ages ranged from 16 to 43. The criterion tasks were 10 Phillips bicycle front axle nuts and 10 bicycle axle parts. At the beginning of the training session, modeling and full physical prompts were used to teach subjects the required sequence of movements. Once participants correctly performed the required movements, discrimination training began. The experimenter modeled the entire task again and asked the subject to do the rest. For every discrimination error, a correction procedure was instituted. The experimenter provided verbal cues and full or faded physical prompts to teach the subject the correct response. The results showed that easy-to-hard procedures could be helpful for teaching a difficult visual discrimination involved in an assembly task to institutionalized severely retarded persons. It also suggested that although easy-to-hard procedures can be effective, application to practical vocational training of the severely retarded may be limited because of high inter-subject variability and numbers of trials and errors required to reach criterion are high.

Irvin, L., & Bellamy, G. T. (1977). Manipulation of stimulus features in vocational-skill training of severely retarded individuals. American Journal of Mental Deficiency, 81, 486-491.

Fifty-one severely retarded adults were taught a difficult visual discrimination in an assembly task by one of three training techniques: a) adding and reducing large cue differences on the relevant-shape dimension, b) adding and fading a redundant-color dimension, or c) a combination of the two techniques. the results showed that a combination of the two techniques (presence of a redundant-color dimension and exaggerated cues on a relevant dimension) resulted in more efficient visual-discrimination learning than did either individually. The findings also demonstrated that the presence of color as a redundant dimension may facilitate discrimination acquisition more quickly and errorlessly than does exaggerated cue difference on a relevant dimension. This study demonstrated that color coding can be used for initial discrimination-training purposes in vocational skill training settings, and simple fading procedures can be used to move individuals toward skilled production.

Jacobs, J. W. (1978). Gleaning: Sheltered employment for retarded adults in rural areas. Mental Retardation, 16(2), 118-122.

The author describes activities of the Gleaners' Project as a response to the paucity of contract work available in rural areas where industries do not locate. The work unit consists of 10 workers, a supervisor, and an aide. The group operates as an enclave. The original activity was that of gleaning crops wasted during mechanical harvesting. Other activities include waste recycling, direct harvesting, and garden products businesses. The primary

habilitative goal is the creation of gainful employment for retarded adults, resulting in a better self-concept and higher esteem in the community.

Jaffe, M., & Snelbecker, G. (1982). Evaluating individualized educational programs: A recommendation and some programmatic implications. The Urban Review, 14(2), 73-81.

In order to develop and implement IEPs, Kiresuk and Sherman's (1968) model called Goal Attainment Scaling (GAS) was introduced as a key aid to teacher. A detailed description of GAS was presented, illustrations of its application to IEPs were offered, and possible problems and resolutions were discussed.

Jamal, M. (1984). Job stress and job performance controversy: An empirical assessment. Organizational Behavior and Human Performance, 33, 1-21.

This study attempted to determine the effects of job stress on job performance in a real work setting and to determine if commitment to one's profession or to one's company affected this aforementioned relationship. The results indicated that job stress defined as role ambiguity, role conflict, role overload, and resource inadequacy, does affect both job performance and job attendance. Both organizational and professional commitment significantly reduced the adverse effects of job stressors.

Jansen, H. P. (1985). Training emphasis task factor data: Methods of analysis (AFHRL-TR-84-50). June 11.

An introduction of REXALL, a program within the Comprehensive Occupational Data Analysis Programs (CODAP) system, is routinely used for assessing the level of interrater agreement obtained when multiple raters evaluate "training emphasis" at the task level. Results showed that REXALL analysis employing new CRP extraction criteria is adequate for samples where the CRP includes all raters and when the CRP has a divergency of less than 25%.

Jenkins, J. R. (1985). Annual report: University of Washington, College of Education, Experimental Education Unit (unpublished report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This report focuses on a PWI that provides services to clients with moderate to severe mental retardation. The project goals are to place clients in competitive employment, and assist in the development of other projects. While employment is a viable goal for persons with mental retardation, it is time-consuming and expensive when compared to other projects. Since the inception of the program in 1979, 141 placements involving 76 individuals have been made. The average IQs of those placed is 57.3. The total income earned is approximately $724,000. Before referral to the PWI, individual received financial subsidy in the form of SSI, SSDI, or other forms of public

assistance, or were recent graduates of secondary school programs. The program measures success as continued employment. Fifty-four percent of persons placed through the project are still employed.

Jenkins, S. (1981). The ethnic dilemma in social services. New York: The Free Press.

Service delivery to ethnic minorities was discussed. Common problems noted included: lack of recognition on the part of planners and practitioners of the diversity of ethnic patterns and cultures of the client population; lack of appreciation of language differences; the persistence of stereotypes, and the threat to the survival of the group as a cultural entity. Following discussion, data collected from interviews with ethnic agency directors, field visits, and from observations were presented. Areas of success in service delivery included: bilingual-bicultural programs, and supportive services to families. Common areas of failure were groups, whether for therapy or other treatment, particularly for teenagers, where a one-to-one basis was seen as much better. Appendixes of statistical tables supporting findings were included, as well as examinations of ethnic service delivery in Israel and Britain.

Johnson, C. (1980). Preparing handicapped students for work: Alternatives for secondary programming. Reston, VA: The Council for Exceptional Children.

This monograph describes program options (special education work experience, coopeative education, skill training, and CETA) for secondary handicapped students. Subsequently discussed are regular programs, mixed integrated programs, etc. Lastly, relevant issues and recommendations are addressed. This is a fairly detailed guide to information sources for secondary public school teachers and students involved in work preparation programs.

Johnson, D. W. (1981). Student-student interaction: The neglected variable in education. Educational Researcher, 10(1), 5-10.

This paper emphasizes the importance of student-student interaction. Propositions are made that peer relationships influence educational achievement, help shape attitudes and values, develop social skills, develop sex-role identity, influence attitudes toward school, and provide an indicator of a person's psychological health. Two instructional strategies are promoted as promising for student-student interaction: the appropriate structuring of learning goals and the use of controversy or conflict in the development of ideas. A combination of individualistic, cooperative, and competitive goal structures are touted as conducive to achievement and development. Properly managed controversy promotes higher achievement, higher level thinking, and congitive understanding according to evidence that is mentioned, but not cited.

Johnson, D. W., & Johnson, R. T. (1980). Integrating handicapped students into the mainstream. Exceptional Children, 47(2), 90-98.

This is a quasi-review, position paper. The authors "review" their research on use of cooperative methods to promote the integration of the handicapped. Their review is badly skewed and does not accurately present the findings from their studies. It is, at best, a sales piece.

Johnson, D. W., & Johnson, R. T. (1981). Effects of cooperative and individualistic learning experiences on interethnic interaction. Journal of Educational Psychology, 73, 444-449.

This study compared effects of a cooperative versus an individualistic learning experience on interaction between white and minority students. Out of 51 fourth-grade students, 11 were minority students. There were significantly more verbal cross-ethnic interactions during instruction and free time activities. Attitude scales (cooperation, cohesion, higher-thought process, and peer support) were given to students. Although all except the cohesion and higher-thought process scales are significant, information regarding the scales is incomplete and the statistical data is sketchy.

Johnson, D. W., & Johnson, R. T. (1981). The integration of the handicapped into the regular classroom: Effects of cooperative and individualistic instruction. Contemporary Educational Psychology, 6, 344-353.

This was a study of 51 students assigned to individualistic or cooperative learning situations. Of these, twelve were LD or BD. There were significant differences on interactions in instructional time, giving and receiving help, and on off-task behavior in favor of the cooperative group. Most of the other results were beyond the .05 level. Again, they overgeneralize their results. This is basically an implementation study.

Johnson, D. W., & Johnson, R. T. (1982). The effects of cooperative and individualistic instruction on handicapped and nonhandicapped students. Journal of Social Psychology, 118, 257-268.

A study of 31 students in cooperative or individualistic conditions of whom, six were MR, LD, or BD. Results from the study of 11th grade students in math revealed that coop students had higher sociometric ratings. There was little difference in achievement though the authors report that there was a difference. This is basically another implementation study.

Johnson, D. W., & Johnson, R. T. (1984). Building acceptance of differences between handicapped and nonhandicapped students: The effects of cooperative

and individualistic instruction. Journal of Social Psychology, 122, 257-267.

A study of 48 fourth grade students, 12 were LD or BD, in cooperative or individualistic situations. While coop had slightly higher ($p < .10$) achievement and non-handicapped higher ($p < .01$), there was no difference between the groups of handicapped in the coop or individualistic groups. In free time periods, handicapped were closer in proximity in the coop condition. Handicapped, in the coop situation saw more individualistic behaviors than normals. Most of the other measures other than implemantation measures were below the .05 level of significance. They see the results in a far more favorable light than the data would suggest.

Johnson, D. W., & Johnson, R. T. (1984). Relationship between black and white students in intergroup cooperation and competition. The Journal of Social Psychology, 125, 421-428.

This study compares intergroup cooperation and intergroup competition to determine impact on cross-ethnic relationships. Forthy-eight sixth-grade students, 28 blacks and 20 whites, were assigned to the two conditions. The authors' claim that more positive cross-ethnic relationships were promoted by intergroup cooperation appears questionable according to the data provided. Achievement was significantly higher for both majority and minority students in the competitive condition. Minority students reacted differently to the cooperative condition in that they showed a higher sense of self-esteem, group satisfaction, and liked learning about the subject more.

Johnson, D. W., & Johnson, R. T. (1985). Mainstreaming hearing-impaired students: The effect of effort in communicating on cooperation and interpersonal attraction. Journal of Psychology, 119(1), 31-44.

A study of 30 third grade students, 10 were hearing impaired (HI), in cooperative and individualistic situations. There were no differences in achievement, though the HI in individualistic had higher scores. HI felt more successful as students in coop condition and non-HI liked the HI better. Most other measures were implementation measures. One contaminating factor was a greater number of interpreters in the coop condition.

Johnson, D. W., & Johnson, R. T. (1986). Mainstreaming and cooperative learning strategies. Exceptional Children, 52, 553-561.

This is a general review article in which suggestions are made about how to run cooperative learning groups. Most of the suggestions are not documented by research. The review of research is grossly overstated and is not documented. Rather, they quote their own review articles which have not been accurately reviewed. While their are some suggestions about "how to do it", the article is not research based.

Johnson, D. W., Johnson, R. T., & Maruyama, G. (1983). Interdependence and interpersonal attraction among heterogeneous and homogeneous individuals: A theoretical formulation and a meta-analysis of the research. Review of Educational Research, 53(1), 5-54.

In this meta-analysis on cooperative learning, they conclude that cooperative learning is superior to other structures for producing positive interactions, self-esteem, and other gains for the handicapped. However, much of the research which they include in their analysis is their own research which is basically only implementation results.

Johnson, D. W., Johnson, R. T., & Skon, L. (1979). Student achievement on different types of tasks under competitive and individualistic conditions. Contemporary Educational Psychology, 4, 99-106.

In a study of 64 first-grade subjects, 36 were assigned to the cooperative condition, 14 to the competitive condition, and 14 to the individualistic condition. Learning tasks included math and reading drill-review, problem-solving tasks, and spatial-reasoning tasks. As expected under these conditions, the students in the cooperative condition achieved higher on all tasks than subjects in the competitive condition, and higher than students in the individualistic condition on drill-review, sequencing, and visual sorting. This is another implementation study.

Johnson, D. W., Johnson, R. T., & Tiffany, M. (1984). Structuring academic conflicts between majority and minority students: Hindrance or help to integration. Contemporary Educational Psychology, 9, 61-73.

In this implementation study, 72 sixth-graders were placed in three conditions: a controversy condition with pro and con views represented, a debate condition where pairs are assigned to a pro or con condition, and an individualistic learning condition. The controversy condition promotes the most cross-ethnic verbal exchange, elaboration, evaluation, information, incorporation of opponents' arguments, and acceptance of relationships, as would be expected from the nature of this condition. The debate condition had higher levels of these variables than the individualistic condition.

Johnson, D. W., Johnson, R. T., Warring, D., & Maruyama, G. (1986). Different cooperative learning procedures and cross-handicap relations. Exceptional Children, 53, 247-252.

Study 1 involved 27 handicapped among 72 sixth grade students in cooperative-controversy, cooperative-debate, and individualistic conditions. Study 2 involved 15 handicapped among 51 fourth grade students. The dependent measure was a kind of social distance scale, Activity Report Scale. As would be expected, the pure cooperation, and debate conditions had more cross

handicapped choices than the individual condition. There were also differences on the unstructured classroom activities. In study two, there were more cross-handicapped choices for in-school/out of class choices in the pure cooperative situation. It is not clear what they did with the scores, since there was a number of skewed distributions on some items. This was solely a self report study.

Johnson, D. W., Maruyama, G., Johnson, R., Nelson, D., & Skon, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. Psychological Bulletin, 89, 47-62.

This is a meta-analysis of 122 studies on goal structure. They find an overwhelming superiority for the cooperative techniques and try to make a strong case for these methods. However, many of the studies that they report as achievement studies could not be so classified. Some used group scores, some used specific group goal measures, and some were of such things as bowling scores.

Johnson, J. L., & Mithaug, D. E. (1978). A replication survey of sheltered workshop entry requirements. AAESPH Review, 3, 116-122.

Replication of a survey to identify sheltered workshop entry requirements was completed in Kansas. The original survey involved 56 respondents representing sheltered workshops, developmental centers, and activity centers in five Northwestern states. Replication in Kansas involved 15 respondents. The results support the notion that there are agree-upon entry requirements for sheltered employment that are reliable across states and regions. The categories that receive highest rankings measured and lowest rankings measured are listed.

Johnson, P. T. (1986a). Congress and the education of handicapped children. In P. L. George (Ed.), The principal's guide to the educational rights of handicapped students (pp. 7-18). Reston, VA: Thomas F. Koerner & Carol Bruce.

This chapter provides an overview of Section 504 of the Vocational Rehabilitation Act of 1973, and P.L. 94-142. It reviews regulations and diascusses the differences between the legislation.

Johnson, P. T. (1986b). The right to a free and appropriate education. In P. L. George (Ed.), The principal's guide to the educational rights of handicapped students (pp. 18-38). Reston VA: Thomas F. Koerner & Carol Bruce.

Johnson, R. T., & Johnson, D. W. (1981). Building friendships between handicapped and nonhandicapped students: Effects of cooperation and

individualistic instruction. American Educational Research Journal, 18, 415-423.

Of the 40 third grade students, 8 were LD or BD. Math work was done in either cooperative or individualistic conditions. Their was more interaction between handicapped and non-handicapped in the instruct period and during free time at the end of the study. In the cooperative condition, handicapped received more encouragement and more negative comments. This is another implementation study.

Johnson, R. T., & Johnson, D. W. (1982). Effects of cooperative and competitive learning experiences on interpersonal attraction between handicapped and nonhandicapped students. Journal of Social Psychology, 116, 211-219.

The 51 fourth grade science students included 10 LD or BD (HS) students. There were more HS by non-HS interaction in a free time period following instruction. Other than this, there were no other significant differences other than pure implementation variables. In none of these studies are we told the extant of the interactions among normals in the free time situation.

Johnson, R. T., & Johnson, D. W. (1983). Effects of cooperative, competitive, and individualistic learning experiences on social development. Exceptional Children, 49, 323-329.

A study of 59 fourth grade students in a science class of whom 12 were LD or BD (HS). The three conditions were compared on several measures. Implementation effects were observed. While there were higher general self-esteem scores for the cooperative condition as a whole, no HS differences were reported. Other effects at the .10 level were reported.

Johnson, R. T., Johnson, D. W., DeWeerdt, N., Lyons, V., & Zaidman, B. (1983). Integrating severely adaptively handicapped seventh-grade students into constructive relationships with non handicapped peers in science class. American Journal of Mental Deficiency, 87, 611-618.

Of the 48 seventh grade science students, 9 were handicapped. The comparison was between cooperative and individualistic conditions. There were no differences on achievement between the groups. The only significant difference between the groups at the 5% level was on implementation measures. All other differences were greater than 5%.

Johnson, R. T., Johnson, D. W., & Rynders, J. (1981). Effect of cooperative, competitive, and individualistic experiences on self-esteem of handicapped and nonhandicapped students. Journal of Psychology, 108, 31-34.

Bowling was the setting for this study of the three conditions for 30 junior high school students, 12 of which were Down syndrome. None of the differences reached the 5% level of significance. There is question about which groups differed from which groups even for the findings reported. There were no post hoc analyses reported.

Johnson, R. T., Rynders, J., Johnson, D. W., Schmidt, B., & Haider, S. (1979). Interaction between handicapped and nonhandicapped teenagers as a function of situational goal structuring: Implications for mainstreaming. American Educational Research Journal, 16(2), 161-167.

Thirty junior high school student, including 12 TMRs, were studied in a bowling situation in cooperative, individualistic, and laissez faire conditions. There were more interactions in the cooperative condition. While they collected data on positive, neutral, and negative interactions, only the positive data are reported and this without statistical analysis.

Johnson, S. S., & Janes, M. W. (1984). Legislation and litigation involving the employment of disabled woman: An overview. Personnel and Guidance Journal, 62, 346-349.

A literature review of the current legislation, interpretive litigation, and court cases relevant to the employment of women with disabilities.

Johnston, T. P. (1982). The Supreme Court and the education of the handicapped. Reston, VA: National Association of Secondary School Principals. (ERIC Document Reproduction No. ED 224 096)

By deciding some cases and refusing others, the United States Supreme Court has begun to provide answers to some of the legal questions concerning the interpretation of two federal statutes: Section 504 of the Rehabilitation Act of 1973 and the Education for all Handicapped Children Act of 1975 (Public Law 94-142). The first of these statutes imposes a duty on recipients of federal funds to avoid discriminating against otherwise qualified handicapped persons. In Southeastern Community College v. Davis, the Court determined that "otherwise qualified" meant qualified in spite of handicap. The ruling in this case has since served as a standard in several other cases. The Court refused to review some cases involving alleged violations of Public Law 94-142, despite the apparent disregard by lower courts of a related Court decision that disallowed the establishment by Congress of retroactive conditions on acceptance of federal funds. The court did determine inBoard v. Rolwley that Public Law 94-142 provided an adequate definition of the free appropriate public education it mandated, a definition involving the provision

of personalized instruction with sufficient support services to permit affected children to benefit educationally, though not guaranteeing a particular level of education.

Jones, J. J., Jr. (1969). Job analysis: National survey findings. Personnel Journal, October, 805-809.

This is a report of the survey conducted by the Bureau of Business Research, California State College, Long Beach and the Job Analysis Research Staff of the California State College, and Los Angeles Foundation. Questionnaires were sent to a nation-wide sample of 1085 firms listed in the 1968 College Placement Annual, 899 responses received. The survey found that job analysis is widely used in the process of gathering information about jobs, e.g., skill, education and training required; physical and mental demands; and environmental conditions. But the survey also showed that methods and practices of job analysis pointed up the need for a better model for improving procedures and to define and measure the psychological and sociological job related variables.

Jones, L. L. (1985). Annual report: University of Washington, Department of Neurological Surgery, School of Medicine (unpublished report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This report discusses the activities of a PWI whose emphasis is providing services to persons with Epilepsy. Toward Skilled Employment in Epilepsy Rehabilitation provides the following services: skill training, work adjustment, job analysis/restructuring, placement and post-employment support services. The program has 15 affiliates, and a job bank of 510 employers. The program has a placement rate of about 50%. This exceeds DVR rate of (9% to 21%).

Kaiser, M. K., Profitt, D. R., & Anderson, K. (1985). Judgments of natural and anomalous trajectories in the presence and absence of motion. Journal of Experimental Psychology: Learning, Memory, and Cognition, 11, 795-803.

McCloskey's curved tube problem was used to test whether people possess a perceptual sensitivity to natural dynamics, enabling them to recognize when anomalous events violate dynamic laws, yet be unable to access this knowledge in an explicit manner in order to solve representational problems. Gender differences were found among adults but not among fifth-graders, whose responses resembled those of the adult males. Adults' performance was not enhanced by instructions to employ mental imagery of the event.

Kaiser, M. K., Profitt, D. R., & McCloskey, M. (1985). The development of beliefs about falling objects. Perception & Psyhophysicsc, 38, 533-539.

Posit that beliefs that reflect perceptual (encoding) influences follow developmental courses that are different from those that do not. Children were unable to integrate the two vectors of horizontal momentum and gravitation to predict the trajectory of a ball.

Kaiser, M. K., Profitt, D. R., & McCloskey, M. (1986). Development of intuitive theories of motion: Curvilinear motion in the absence of external forces. Developmental Psychology, 22, 67-71.

A U-shaped developmental trend in predicting the outcome from the curved tube problem. Postulated that the school-aged children's errors resulted from the systematic overextension of a general motion concept.

Kaiser, M. K., Jonides, J., & Alexander, J. (1986). Intuitive reasoning about abstract and familiar physics problems. Memory and Cognition, 14, 308-312.

Increasing the number of exemplars attempted to promote transfer from a familiar example of the curvilinear motion problem to an abstract curvilinear motion problem. Lack of transfer. Subjects draw on specific experiences to solve the common-sense problems at a very concrete level. Since the relevant similarities of the common-sense and abstract problems exist only at the level of formal analysis, it is necessary that the common-sense problems be viewed in formal terms for the transfer to occur.

Kallen, D., & Colton, S. (1980). Educational developments in Europe and North America since 1960 (Report No. ED-EPP-S.75). Paris: United Nations Educational, Science, and Cultural Organization. (ERIC Document Reproduction Service No. ED£203£443)

This six-chapter report focuses on changes and problems in educational systems in Europe and North America. Some of the areas covered are: birth rates, economic stagnation, schooling vs. deschooling, compulsory and universal education, deteriorating student achievement, special educational programs for the handicapped and migrant workers' children, youth unemployment, lifelong learning, etc. The authors noted that, among all the changes discussed, the most visible have been the realization of many educational innovations of the 1960s and the politicization of educational issues.

Kazdin, A. (1973). The effect of vicarious reinforcement on performance in a rehabilitation setting. Education and Training of the Mentally Retarded, 8, 4-11.

Report of a study exploring the effect of reinforcement on nonreinforced behavior and performance in a rehabilitation setting. A comparison was made between the adjacent peers with reinforcement and a control group. The subject pool included 2 men and 2 women enrolled in a sheltered workshop for the mentally retarded. Results were charterd and discussed.

Kelly, W., Salzberg, C., Levy, S., Warrenteltz, R., Adams, T., Crouse, T., & Beegle, G. (1983). The effects of role-playing and self-monitoring on the generalization of vocational social skills by behaviorally disordered adolescents. Behavioral Disorders, 9, 27-35.

Four adolescents attending vocational classes at a residential treatment program for behaviorally disordered youth participated in a social skill training program. Intervention consisting of verbal training and role-playing resulted in rapid acquisition of appropriate responses to a supervisor's instructions. However, there was no generalization of the behavior change beyond the intervention site. The addition of a second intervention, self-monitoring,resulted in rapid generalization. Verbal training and role-playing seemed to be a primary contributor to response acquisition while self-monitoring appeared to facilitate response generalization. The discussion addresses mechanisms for generalization and suggests that an ecological understanding of the natural environment in which behavior change is desired is critical for the development of an effective technology of response generalization.

Kerachsky, S., & Thornton, C. (1987). Findings from the STETS transitional employment demonstration. Exceptional Children, 53, 515-521.

The Structural Training and Employment Transitional Serivces (STETS) program model is described in this article. STETS is important because its design and evaluation are baased on an experimental methodology, and it can generate the most accurate findings available on the transitional-employment concept. The evaluation of STETS focuses on issues such as: labor market behavior, training and schooling, public-transfer dependence, life style, and the benefits versus the costs of the program. The results demonstrate that transitional employment services such as were provided by STETS can be very instrumental in helping mentally retarded young adults achieve their employment potential.

Kerr, N. L. (1983). Motivation losses in small groups: A social dilemma analysis. Journal of Personality and Social Psychology, 45, 819-828.

This was a study of 39 male and 36 females in a dyad "air pumping" situation. The study explored "free rider and sucker" effects. Dyad members were willing to free ride, i.e., let the other person carry the load but were unwilling to carry a free rider, i.e., be a "sucker." However, if failure performance was a function of perceived lack of ability, no sucker effects emerged. Boys were more prone to the sucker effect than were girls.

Kerr, N. L., & Bruun, S. E. (1981). Ringelmann revisited: Alternative explanations for the social loafing effect. Personality and Social Psychology Bulletin, 42, 224-231.

This is a report on two experiments which studied social loafing with undergrads in air pumping situations. Social loafing was demonstrated as group size increased for both high or low individual performance as the basis for group payoff.

Kerr, N. L., & Bruun, S. E. (1983). Dispensability of member effort and group motivation losses: Free-rider effects. Journal of Personality and Social Psychology, 44, 78-94.

Three experiments on undergrads are reported in this article. When group reward was based on only the high score for the group, the lower the perceived ability of the member, the effort demonstrated. The opposite effect was seen when the low score was rewarded. As size of group increases, a person's concept of dispensibility increases with a corresponding loss of motivation. Apparently, to maintain motivation, an additive task, i.e., all member's scores count toward the reward, and a smaller group works best.

Kerr, N. L., & MacCoun, R. J. (1984). Sex composition of groups and member motivation II: Effects of relative task ability. Basic and Applied Social Psychology, 5, 255-271.

In this button pressing study of 61 male and 61 female undergrads working in dyads, when the partner was more able, both sexes worked harder in mixed sex groups than in same sex groups. When ability was equal, there was no difference in the sexes in mixed, same, or individual conditions. This supports the "esteem maintenance model". Both sexes place greater value on demonstrating competence to opposite sex partners than to same sex partners.

Kerr, N. L., & Sullaway, M. E. (1983). Group sex composition and member task motivation. Sex Roles, 9, 403-417.

This was a study involving an air pumping experiment for 82 male and 88 female undergrads. Scores were standardized to equate performance differences

between sexes. Mixed sex dyads produced the best performances. No firm explanation was given for the results because several alternative explanations were possible.

Knapczyk, D. R., Johnson, W. A., & McDermott, G. (1983). A comparison of the effects of teacher and peer supervision on work performance and on-task behavior. The Journal of the Association for the Severely Handicapped, 8(4), 41-48.

This study was conducted to determine the effectiveness of peer supervision in improving productivity, work accuracy, and work behavior of severely handicapped persons. The study was conducted in a prevocational education program in a public school special education classroom. Six students, aged 16 to 18, served as subjects. All were diagnosed as severely retarded and all were physically capable. Study procedures were primarily observational. Independent variables were: (1) peer and teacher supervision with no systematic supervision, and (2) peer supevision with teacher supervision. Results showed that peer supervision consistently produced more on-task behavior improvement than teacher supervision. Implications were discussed.

Knowlton, H. E., & Clark, G. M. (1987). Transition issues of the 1990s. Exceptional Children, 53, 562-563.

This brief article summarizes previous articles in the transition special issue of Exceptional Children. Some particular issues that are pointed out by the authors are the role of high schools in the transition process, particularly related to the excellence in education movement; the need for differential role preparation of transition specialists and job developers; the need to develop local ownership of transition models in order to promote implementation; the reluctance of schools to do this; and finally, the problems special education has had in effecting system-wide changes in the schools.

Kojima, Y. (Ed.). (1981). Disabled people in Japanese community. Tokyo: Japan Council for the International Year of Disabled Persons. (ERIC Document Reproduction Service No. ED 226 535)

The purpose of this three-section book is to describe the daily life of disabled pesons in Japan, to introduce readers to social and educational programs and services for handicapped people, and to discuss some of the legislative and educational issues concerning handicapped people. The subject pools of this study consisted of youths with different types of disabilities, socioeconomic status, and educational attainment.

Kolb, D. A. (1965). Achievement motivation training for under-achieving high-school boys. Journal of Personality and Social Psychology, 2, 783-792.

This is a report of need-achievement motivation training for 20 experimental subjects and 37 control boys in a campus based summer program. Experimentals out-performed controls at the 1.5 year follow-up. High SES boys continued to out-perform their controls but low SES boys did worse than their low SES controls.

Kraus, D. & Fredericks, B. (1986). Report of the parent training program for foster parents serving youths with severe behavioral disorders. Teaching Research Infant and Child Center, XIV, 1-9.

This edition of the Newsletter is dedicated to the description of a project developed to train foster parent to serve youth who are mildly retarded or learning disabled and severely behavior disordered. Parent training includes effective behavioral management strategies, positive interaction skills, assessment of youth's needs for instruction, formal skill progress to teach self help skills, and data collection and analysis techniques. The need for this program resulted from review of child placements in state institutions between July 1984 and July 1985. The reviewed indicated that 2/3s of children placed by the Child Services Division were mildly retarded with severe behavior disorders. A state commitment to deinstitutionalization dictates that these individuals must be placed in a less restrictive environment. The Newletter describes project objectives, screening youth, recruitment of parents, seminar on behavioral management, independent living skills and examples of summaries of client behavioral data.

Kraut, A. I. (1970). Predicting turnover of employees from measured job attitudes. Paper presented in Symposium on Contribution of Longtitudinal Studies of Organizational Behavior, American Psychological Association Convention, Miami Beach, FL.

The results of this study suggest that an employee's expressed intent to remain at a job is highly correlated with his actual remaining on the job. This result was confirmed for a period of 18 months and five years. In addition the employee's intent to remain was most highly related to his feelings about the work itself and his feelings toward the company. A self-administered questionnaire completed by 911 IBM salesmen provided the source of this data.

Kregel, J., Wehman, P., Seyfarth, J., & Marshall, K. (1986). Community integration of young adults with mental retardation: Transition from school to adulthood. Education and Training of the Mentally Retarded., 35-42.

This article assessed the degree of community integration of 300 young adults in Virginia who had participated in special education programs for students

with mental retardation. Surveys were administered by trained interviewers on variables related to basic self-care, home management, community usage, use of free time, recreational/leisure activities, and self-satisfaction. Results indicated that the individuals surveyed were generally satisfied with their present situation and most displayed some degree of competence in the area of independent living skills. Implications of the results and the necessity for future research are briefly discussed. Further investigation is needed to determine the effects of factors such as type of school program, employment status, and level of retardation on community integration. Complete and accurate information on each of these factors is required to enable professional to design training programs that maximize the community integration of individuals with mental retardation.

Kurtz, P. D., & Neisworth, J. T. (1976). Self control possibilities for exceptional children. Exceptional Children, January, 212-217.

Recently, there has been increased interest in having the person control his own behavior. With the growing emphasis on normalization for handicapped children, self control techniques may be especially pertinent. Self control strategies that appear to have immediate implications for exceptional children: a) cue regulation - refers to actions taken to alter conditions antecedent to a target behavior. The probability of a target behavior can be influenced by rearranging the cues previously associated with it, b) self reinforcements - (positive) reinforcement takes place when a person presents himself contingently with a positive consequence. Such as going to movies or thinking positive self-consequence. (negative) reinforcement involves the contingent removal of a negative consequence, such as crossing out items on a list of tasks to be performed, c) self observation involves the monitoring of one's own actions which can serve as a self modification techniques.

Lahey, M. A., & Saal, F. E. (1981). Evidence incompatible with a cognitive compatibility theory of rating behavior. Journal of Applied Psychology, 66, 706-715.

Cognitive complexity of raters, assessed by three different measures, was studied in its relationship to the cognitive demands imposed by five different rating scales. Compatibility of cognitive complexity of the rater and cognitive demands of the rating scale had been cited (Schneier, 1977) as a contingency for reducing undesirable psychometric properties of peformance, described as leniency, halo, range restriction, rater satisfaction and rater confidence. The study failed to support Schneier's cognitive compatibility hypothesis.

Landesman-Dwyer, S. (1981). Living in the community. American Journal of Mental Deficiency, 86(3), 223-234.

This is a literature review focused on studies done in the last 15 years regarding deinstitutionalization and living in the community. Through the review, the author made some important findings about the relationship between successful programs and institutional size, staff patterns, cost, client characteristics, types of programs, community support, facility location, family involvement, and peer support. Findings included that "smaller is better" in not necessarily true for institutions; that, although urban settings served a larger number of people and programs, the rural area was necessarily segregated and limited community services to handicapped persons. The review concluded with recommendations.

Langone, J. (1981). Curriculum for the trainable mentally retarded . . . or What do I do when the ditto machine dies! Education and Training of the Mentally Retarded, 16, 150-154.

The author presented several suggestions to teachers, particularly those in rural areas, on how to better integrate curriculum content and learning activities for trainable mentally retarded students. Suggestions included teachers becoming familiar with the student's learning environment, family background, and individual characteristics.

Langone, J., & Gill, D. (1986). Developing effective vocational programs for mentally retarded persons: Cooperative planning between rehabilitation & education. Journal of Rehabilitation, 63-67.

This article presents six strategies designed to improve the effectiveness of the IEP as a management plan. Strategy 1: identifying appropriate vocational program goals. Strategy 2: identifying potential employment opportunities. Strategy 3: assessing present level of vocational performance. Strategy 4: translating program goals into performance objectives. Strategy 5: identifying needed support services. Strategy 6: establishing evaluative criteria. This article emphasizes the interdependent working relationship that must be established between rehabilitation and education professionals. This relationship is the basis for developing programs that will improve the transition of retarded students from school to work.

Langone, J., & Westing, D. (1979). Generalization of prevocational and vocational skills: Some practical tactics. Education and Training of the Mentally Retarded, 14, 216-221.

Tactics and strategies for promoting generalization in vocational training are discussed in this paper: 1) generalization across settings and conditions, 2) generalizations across persons, 3) generalizations across time, 3) generalizations across materials, 5) generalization and reinforcement.

Larsson, D., & Larsson, E. (1983). Manipulating peer presence to program the generalization of verbal compliance from one-to-one to group instruction. Education and Treatment of Children, 6, 109-122.

In a multi-element design in Experiment 1, a first-grade child's rate of compliance to individual instructions was shown to be zero during a small-group reading period, but was 100% with the teacher alone. Modeling, prompts, praise, and token reinforcements failed to improve performance in the small group. Alternating single-peer-reading sessions with the group-reading sessions was followed by an increase in the child's compliance to 100% in group-reading sessions. In Experiment 2, a sixth grade child's rate of verbal compliance to questions was minimal in the presence of peers but close to 100% in one-to-one sessions. In a multiple-baseline design, successive practice with individual categories of questions during the presence of a single peer from group-reading sessions was successful in programming generalization of verbal compliance both to the group-reading sessions and to untrained questions and spontaneous speech. This effective generalization programming required little extra effort for the teacher and, in Experiment 1, the simple design and recording procedure were sufficient to demonstrate control over verbal compliance.

Latane, B. (1981). The psychology of social impact. American Psychologist, 36, 343-356.

This is a general theory article on the social impact of group size. The main theme is that there is more social impact as group size increases but that the addition of the first person has a greater impact than the addition of the 99th person.

Latane, B., Williams, K., & Harkins, S. (1979). Many hands make light the work: The causes and consequences of social loafing. Journal of Personality and Social Psychology, 37, 822-832.

Two experiments, using undergrads in a clapping and cheering task, were examining the Ringelmann effect of social loafing. The Ringelmann effect was demonstrated in the first and second experiments. However, there was a general increase in noise production in the second experiment, possible because the task was seen as more challenging.

Latham, G. P., & Wexley, K. N. (1977). Behavoral observation scales for performance appraisal purposes. Personnel Psychology, 30, 255-268.

A quantitative study investigating the measurement and evaluation of the employee in terms of observable behaviors that are critical to job success or failure. 78 behavioral items were developed from 1204 critical incidents. The frequency with which a supervisor (N = 300) engaged in each behavior was

rated on a 5-point Likert type scale by two sets of observers. They came up with 3 tables to show the result of the research.

Lawshe, C. H., & Alessi, S. L. (1946). Studies in job evaluation: IV. Analysis of another point rating scale for hourly-paid jobs and the adequacy of an abbreviated scale. Journal of Applied Psychology, 30, 310-319.

The study examined the validity of an abbreviated job evaluation scale in relation to the NEMA scale. The study focused on the correlation between three factors--general skill demands, specific skill demands, and job characteristics--and hourly wage rates of industrial employees. The abbreviated scale was determined to yield practically identical results to those from the more complex and time consuming NEMA scale adapted by Kress for the National Electrical Manufacturing Association.

Lawshe, C. H., Dudek, E. E., & Wilson, R. F. (1948). Studies of job evaluation: VII. A factor analysis of two point rating methods of job evaluation. Journal of Applied Psychology, 32, 118-129.

This seventh study in a series further explored the reliability of two different job evaluation scales (NEMA and Simplified) in predicting job-wage rates. It concluded that both scales measured the same phenomenon with the same degree of effectiveness, although it raised questions regarding the generalizability of the ratings from one employment context to another. The authors suggest the possibility "that another item specific to the occupations in question should be added to allow for evaluation of any unusual aspects that are not general to all or most occupations." The characteristics applicable to a general evaluation of jobs include: general skill demands, supervisory demands, hazardous and non-hazardous job characteristics, and job responsibility.

Lawshe, C. H., & Farbro, P. C. (1949). Studies in job evaluation: VIII. The reliability of an abbreviated job evaluation system. Journal of Applied Psychology, 33, 158-166.

This eighth study in a series further examined the reliability of an abbreviated job factor scale in conducting wage rate analyses. This study focused on the differences in job evaluations produced by various persons using the same scale. Management personnel, supervisors, and union labor labor representatives as evaluators each yielded data of differing reliability. The management and supervisors' ratings had higher coefficients of reliability than those of labor.

Lawshe, C. H., & Wilson, R. F. (1946). Studies in job evaluation: V. An analysis of the factor comparison system as it functions in a paper mill. Journal of Applied Psychology, 30, 426-434.

This fifth study in the series also suppported the use of an abbreviated job evaluation scaled in determining job wage rates. It found that three job elements--skill requirements, working requirements, and mental requirements--had .99 correlation with the Factor Comparison System developed by Bunge, Burke, and Hay.

Lawshe, C. H., & Wilson, R. F. (1947). Studies in job evaluation: VI. The reliability of two point rating systems. Journal of Applied Psychology, 31, 355-365.

This sixth study in a series examined the reliability of two job-factor analyses used to predict wage rates. The NEMA scale had a reliability coefficient of .77 and the Simplified scale had a .89 reliability coefficient. Both scales were assessed for their correlation with actual labor grade placements--i.e., did the scale rating match an employee's actual job category? Ninety percent of the NEMA ratings fell within two job grade categories and ninety-eight percent of the ratings from the simplified scale fell within the two grade range. Both scales indicate that the job skills required for a job is the primary factor in wage rate determination.

Legelka, P., & Phillips, M. M. (1978). Individualized education programming at the secondary level. Teaching Exceptional Children, 10, 84-87.

The authors discussed the possible impacts of legislative mandates on secondary level education and vocational education. They suggested that special educators and vocational educators cooperate in programming for adolescent handicapped students. They emphasized that the program manager be the key person to facilitate this cooperation.

Lehr, D., & Haubrich, P. (1986). Legal precedents for students with severe handicaps. Exceptional Children, 52, 358-365.

Since the passage of the Education for All Handicapped Children Act in 1975, many legal precedents have been established that serve to define the parameters of programs for students. These parameters, as well as emerging and as yet unresolved issues as they relate to students with severe handicaps, are discussed. The authors focus their discussions around an example of a student with severe handicaps and present the effects of the precedents on this child's free appropriate public education, including extended school year, related services, appropriate curriculum, and appropriate placement.

Levine, E. L., Ash, R. A., & Bennett, N. (1980). Exploratory comparative study of four job analysis methods. Journal of Applied Psychology, 65, 524-535.

An empirical study of four job analysis methods: job elements, critical incidents, the Position Analysis Questionaire (PAQ) and task analysis were compared to assess their utility for the purpose of personnel selection. Results revealed that the PAQ was the least costly method to apply but also the least favorable and the critical incidents methods appeared to have higher quality than other methods. Basically, there were few differences among the methods, because all job analysis results must be translated into a relatively restricted set of alternative examining methods. Thus no matter how rich in detail a job analysis report may be, resultant exam plans will not vary enough to produce significantly different evaluation of their quality.

Lignugarus-Kraft, B., Rule, S., Salzberg, C. L., & Stowitschek, J. J. (1986). Social interpersonal skills of handicapped and nonhandicapped adults at work. Journal of Employment Counseling, 2030.

A discussion of the social interactions of successfully employed handicapped and nonhandicapped employees. Provides a basis for empirical identification of pattern and content of social interactions among the successfully employed. Observations were conducted in two regular employment settings.

Lin, A., Blackman, L. S., & Clark, H. T. (1986). Strategy and abilities training for prose recall and comprehension in mentally retarded children. Journal of Mental Deficiency Research, 30, 89-97.

The effects of three training conditions of strategies, structure of intellect derived abilities, and a combination of the two on the factual recall of, sequencing of, and drawing inferences from prose passages. The abilities training consisted of the evaluation of semantic relations and convergent production of semantic systems (Guilford, 1967). Strategies consisted of imaging and verbal elaboration. Factual recall served as a basic indicator of reading comprehension while sequencing and inferences were used as generalization measures. Subjects were 45 educable mentally retarded children and adolescents. All three training conditions significantly increased recall. No differences were found among conditions for either factual recall or generalization tasks.

Luciano, M. C. (1986). Acquisition, maintenance, and generalization of productive intraverbal behavior through transfer of stimulus control procedures. Applied Research in Mental Retardation, 7, 1-20.

The acquisition of productive intraverbal behavior involving the emission of the thematically related responses was evaluated. Three mentally retarded children participated in this study and a multiple-probe design was used in

training productive intraverbal behavior (three stimulus classes). Training was conducted using an errorless discrimination procedure (prompt delay) and a variation of this to transfer vocal response from control of visual stimuli (tact behavior) to verbal stimuli (intraverbal behavior). Reinforcement probability was equal for correct response prior to and following a prompt and incorrect responses were ignored. All three subjects met the acquisition criteria. Prompt delay procedures a) produced no incorrect responses, b) decreased acquisition criteria slightly over time, c) produced responses generalization during training, d) increased comprehensive intraverbal behavior after training productive intraverbals. Variations in prompt delay procedure produced the same results except a) a low rate of errors and b) chaining of different responses per trial appeared when an additional prompt was implemented.

Luckasson, R. A. (1986). Attorneys' fees reimbursement in special education cases: Smith v. Robinson. Exceptional Children, 52, 384-389.

The Supreme Court in Smith v. Robinson indicated substantial restrictions on the ability of students and their families to recover legal expenses incurred in pursuing their due process rights under the Education of the Handicapped Act. The Act's reliance on private enforcement by parents coupled with the difficulties inherent in attempting to pursue administrative and legal remedies without legal training suggest that Congress intended that reimbursement of attorneys' fees be available.

Madden, N. A., & Slavin, R. E. (1983a). Effects of cooperative learning on the social acceptance of mainstreamed academically handicapped students. Journal of Special Education, 17(2), 171-182.

Students were randomly assigned to either a cooperative or control learning experience in math. There were 40 identified LD students and 143 normal 4th, 5th, & 6th grade children who participated in the seven week study. LD students received fewer rejects but no more acceptances in the post experiment sociometric measure. While there were significant differences for the combined LD/normal sample, there were no significant differences for the LD kids. The same type of result was found on the self-concept measure.

Madden, N. A., & Slavin, R. E. (1983b). Mainstreaming students with mild handicaps: Academic and social outcomes. Review of Educational Research, 53, 519-569.

In a general review of special education students in regular classrooms, there was a review of cooperative education techniques. While showing some promise as a means for integrating the handicapped, the evidence was found to be marginal. The stronger research did show some peer relationship gains for the handicapped but there was no long term follow-up studies and often the gains were only marginally significant.

Maguire, M., & Ashton, D. (1987). Employers' perceptions and use of educational qualifications. Educational Analysis, 3, 25-36.

The aim of this paper is to explore the relevance of some research findings on employers' perceptions and use of educational qualifications in relation to these two issues, and to discuss the implications for the school curriculum. The research findings cast serious doubts on the position of academic qualifications as the prime determinant of occupational attainment. It is suggested that the young people need to be given a more relevant curriculum, related to their present and future requirements within the local labor market. By making them more aware of the world of work, of the expectations that employers and others have of them, and of the limited occupational choice available to them, it would make them better able to cope with the demands that the local labor market makes on them. Such a curriculum would go some way toward reducing the gap between education and the world of work.

Maino, D. M. (1985). Microcomputer mediated visual developmental and perceptual therapy. Journal of the American Optometric Association, 56(1), 45-48.

This paper provides an overview of educational and commercial software programs that with modification could meet the therapeutic needs of optometrists.

Malakoff, E. H. (1981). Schools and law of the handicapped (rev. ed.). Washington, DC: National School Boards Association, Council of School Attorneys. (ERIC Document Reproduction No. ED 219 844)

This document was prepared to update school administrators and attorneys on changes on P.L. 94-142 and Section 504-since both the courts and Congress are continually updating the standards set in these laws.

Manion, I. G., & Bucher, B. (1986). Generalization of sign language rehearsal strategy in mentally retarded and hearing deficient children. Applied Research in Mental Retardation, 7, 133-148.

Demonstrates the effectiveness of a nonverbal rehearsal strategy for essentially nonverbal mentally retarded children. Uses fading of cues to foster maintenance of rehearsal behavior. Looks in within-task and across-task generalization of training.

Mank, D. M., Rhodes, L. E., & Bellamy, G. T. (1985). Four supported employment alternatives. In W. Kiernan & J. Stark (Eds.), Pathways to

employment for developmentally disabled adults (pp. 139-153). Baltimore, MD: Paul H. Brookes.

The authors assert (1) real employment opportunities must be developed and structured so that program participants experience the full range of work outcomes, including income, integration with people without disabilities, good working conditions, and other work benefits and (2) a successful supported employment program must offer ongoing support that allows persons with severe disabilities to perform the available work. Four employment models are described: The Supported Jobs Model places individuals in regular community jobs and provides support at the worksite as needed for the person to learn and perform the work. The Enclave Model places a group of individuals with diasbilities who are trained and supervised among nonhandicapped workers in an industry or business. The Mobile Crew Model is a small, single purpose, mobile business and, usually by van, places a group of individuals in the community to perform service jobs. The Benchwork Model provides employment in electronics assembly work in a service agency that also functions as a business enterprise.

Mann, W., & Gregory, A. (1981). The employment environment for mildly intellectually handicapped young people (Report No. ISBN-0-909931-14-3). Clayton, Victoria, Australia: Monash University. (ERIC Document Reproduction Service No. ED 247 461)

This paper discussed the employment problems of handicapped youth in Australia. Four factors were identified as influencing the successful employment of mildly mentally retarded youth: qualities of individual job seekers, employer attitudes, nature and requirements of the job, and present labor market conditions. The author believes that the last factor is not given enough attention. He argued that economic, technological, and labor market trends powerfully affect the future of employment for handicapped people. He suggested that the more advanced our technology is, the more handicapped people are turned to jobs of high labor intensity, low income, and low skill levels. Specific suggestions to improve school-to-work transitions included incentives for employers, identification of suitable jobs, educational objectives, vocational skills, placement, etc.

Manpower aspects of recent economic developments in Europe. (1969). Geneva: International Labour Office. (ERIC Document Reproduction Service No. ED 035 758)

This overview of trends examines factors such as growth of the labor force, manpower policy, migration of workers, and educational changes. Trends were analyzed from a historical as well as statistical perspective. Interpretations were discussed.

Martino, L., & Johnson, D. W. (1979). Cooperative and individualistic experiences among disabled and normal children. Journal of Social Psychology, 107, 177-183.

This study of swimming instruction involved 6 LD and 6 non-LD third grade boys. In free play time following the instruction in either cooperative pairs or individual learning, there was more cross handicapped interaction in the cooperative condition. There were some differences in the number of skills learned, as well. There were few statistical analyses and data presentation was poor, e.g., they report means and standard deviations for three subjects rather than present the actual scores.

Mastropieri, M. A., & Scruggs, T. (1984). Generalization: Five effective strategies. Academic Therapy, 19, 427-431.

This article suggested five instructional strategies to help children generalize what they had learned. The following are the strategies that were used, arranged in the order in which they were implemented: 1) verbal or written instructions, 2) feedback, 3) reteaching and positive practice, 4) rewards or contracts, 5) enlisting peer cooperation.

Matson, J., & Andrasik, F. (1982). Training and leisure-time social-interaction skills to mentally retarded adults. American Journal of Mental Deficiency, 86, 533-542.

In a series of three experiments, the effectiveness of social-skills training in a therapy room and self monitoring and reinforcement in a natural setting were compared as methods of promoting generalization to the ward. Treatment was directed at conversational skills of eight mentally retarded adults who had been selected on the basis of social deficits they had displayed during a leisure hour. Analysis of the results showed that generalization to the natural environment occurred when social-skills training was used. The addition of self-monitoring and reinforcement in the natural environment proved to be effective for facilitation generalization.

Matson, J., & Martin, J. (1979). A social learning approach to vocational training of the severely retarded. Journal of Mental Deficiency Research, 23, 9-17.

The purpose of the present study was to test an inexpensive system which required little extra training equipment in a first attempt to apply a social learning methodology to the training of vocational behavior. Subjects were seven severely retarded adults from 20-45 years of age. Multiple baseline design across subjects was used in this study. Behaviors selected for treatment were those considered not conducive to socially appropriate work behavior, such as inadequate work skills, chin wiping, inappropriate touching, and eyes of task. The first phase of training involved a group meeting to

discuss work behavior. The second phase of training involved staff modeling of appropriate target behavior at a station in the workshop which had been set-up for assembling or sorting. Results showed that training resulted in improvement in all types of target behavior. This study demonstrated the utility of a social learning package for increasing work efficiency while decreasing socially undesirable work behavior of the severely retarded. The social-learning oriented training was also beneficial in that it more closely approximated the normal work setting when compared to other instructional strategies.

Mazin, L. E. (1986). Data-based lesson plans. Education School, 7-9.

The author, an associate school superintendent, advocated the curriculua which were based on the Behavioral Characteristics Progression (BCP) developed by the Santa Cruz County District in California and the Hawaii Early Learning Profile (HELP) Activities Guide. A brief description of th two programs was presented and application procedures and positive outcomes were given.

McAndrew, I. (1979). A study of school leavers with a physical disability. Victoria, Australia: Yooralla Society of Victoria, Department of Research and Development. (ERIC Document Repriduction Service No. ED 212 095)

This retrospective study evaluated the transition process of handicapped youth in Australia. The subject pool comprised 172 young adults aged 18-28, all with motor function disabilities. Data collected through structured interviews with these students and their parents included problems imposed by disability, school experiences, postsecondary education, employment history, status, expectations, and leisure time activities. The researchers found that those students who had attended schools for the physically handicapped were characterized by extent of disability, early dropout rates, lack of social and independent living skills, and having lower expectations for jobs.

McCarthy, P., Everson, J. M., Inge, K. J, & Barcus, J. M. (1985). Transition from school to work: Developing the process for individuals with severe disabilities. Techniques: A Journal for Remedial Education and Counseling, 1, 463-472.

The authors offered a step-by-step model for transition process from school to work. It was argued that a local transition core team should be established to develop and implement an individualized transition program for students with severe disabilities. Other key factors covered assessment to follow-up studies.

McCormick, E. J. (1967). Job dimensions based on factorial analysis of worker-oriented job variables. Personnel Psychology, 20, 417-430.

A study focused on worker-oriented approach to job analysis and the related elements from the contextual aspects of the job. In this study, the author compared the results of two series of factor analyses and found that considering the two factor analyses in general, a fairly substantial number of the factors resulting from each were congrugent with factors from the other. Thus, he concluded that in general, the results of the studies indicated strongly that there is structure in the domain of human work as one looks at human work in terms of human behaviors and the contextual and environmental attributes of the work situation.

McCormick, E. J. (1977). Application of job analysis to indirect validity. Personnel Psychology, 30, 402-413.

A discussion of the strengths and shortcomings of three job-analysis methods, namely, the factor-oriented, job-oriented and worker-oriented. The last two methods were found to be offering the greatest potentialities for use in the transfer of validity from one situation to another. The check-list method of analyzing jobs is rather specifically implicit in the synthetic type of indirect validity.

McCormick, E. J., Jeanneret, P. R., & Mecham, R. C. (1972). A study of job characteristics and job dimensions as based on the Position Analysis Questionnaire (PAQ). Journal of Applied Psychology, 56, 347-368.

The presented study consisted of two phases: the first involved the development of a structured job-analysis instrument that provided for characterizing jobs in terms of certain types of human behaviors, and the subsequent analysis of the dimensional or factorial structure of jobs based on such behavior; the second was directed toward the potential use of quantitative data derived with this instrument in the prediction of aptitude requirements of jobs and of rates of pay. The hypothesis is that there exists some underlying behavioral "structure" or order to the domain of human work. The researchers concluded, following their research, that 1) there are common denominators of jobs of a behavioral nature that exist in jobs of different types; 2) these common denominators can be expressed in language that lends itself to the reliable and valid analysis of individual jobs; 3) the rather specifc common denominators form reasonably stable, meaningful job dimensions; and 4) these dimensions collectively can serve as an adequate basis for characterizing jobs in their totality in terms of the type of behavioral variables in question.

McCuller, W., & Salzberg, C. (1984). Generalized action-object verbal instruction-following by profoundly mentally retarded adults. American Journal of Mental Deficiency, 88, 442-445.

The acquisition of generalized action-object instruction-following by three profoundly mentally retarded adults was investigated. Each subject was taught to follow seven verbal instructions in a stair-step diagonal progression through a 4x4 matrix of actions and objects. Probes monitored the occurrence of generalized action-object instruction-following responses within a multiple baseline design. As subjects were taught action-object responses, they responded to novel, untrained instructions that were comprised by recombining previously learned actions and objects. Prior matrix-training language research was systematically replicated, and findings were extended to profoundly retarded adults.

McDermott, L. D. (1983). The effectiveness of special education: Selected literature and unpublished documentation with recommendations for the future. Unpublished manuscript. St. Paul: University of Minnesota.

This paper provides literature reviews and summarizes a number of studies dealing with special education issues. Appendix B provides excerpts from a study that concludes that persons with learning disabilities show more progress in special education classes than regular. The paper includes results on vocational and social outcomes of a secondary program for persons with mental retardation. They found subjects were satisfied with what they were doing. However, most were still receiving some sort of financial assistance.

McDonald, T., & Hakal, M. D. (1985). Effects of applicant race, sex, suitability, and answers on interviewer's questioning strategy and ratings. Personnel Psychology, 38, 321-334.

This study examines 1) whether an interviewer uses a confirmatory questioning strategy to test an initial impression of an applicant, 2) how information elicited from the applicant affects the interviewer's final decision, and 3) whether the above linkages create a source of bias in interview decisions. The findings suggest that interviewers do not engage in impression confirming information seeking strategies. Applicant ratings were based more upon information elicited in the interview than upon initial impressions. The study does not support Snyder and Swann's (1978) contention that individuals adopt impression confirming information seeking strategies when testing hypotheses about others.

McDonnell, J. (1986). Do we know enough to plan for transition? A national survey of state agencies responsible for services to persons with severe

handicaps. Journal of the Association of the Severely Handicapped, 11, 53-60.

Despite efforts of state and federal initiatives to facilitate transitional planning and service delivery, the successful transition of young adults with disabilities to the community remains an unresolved problem for parents and service planners. Two major barriers to appropriate services are: 1) shortages in community vocational and residential programs, 2) in effectiveness of existing vocational and residential programs in producing meaningful results for adults with severe handicaps. This study surveyed administrators of school, vocational, and residential programs serving severely disabled to identify accessibility of community service programs. Survey instruments addressed: a) range of service alternatives within each state, b) distribution of individuals served across alternatives, c) current number of individuals on waiting lists for vocational and residential services as of 4/1/84, d) projected increases in funded vocational and residential services within each state, e) questions posed to educational administrators focused on numbers of students with severe disabilities graduating from high school in '84, '85, and '86, and f) questions to vocational administrators focused on range of services provided to persons with severe disabilities. Results of the study document trends relevant to service planning for young adults with severe handicaps transitioning from high school to community: a) there are significant numbers of severely handicapped students exiting high school within the 3 yr. period examined, b) are substantial waiting lists for vocational residential services in most states, and c) states are projecting limited increases in the numbers of vocational and residential placements for graduates of public school programs over this 3 yr. period. Conclusions: agencies responsible for administering community-based vocational and residential services for adults with severe disabilities are facing a crisis. If progress is to be made in addressing issue of transition, changes will be necessary and include: 1) implementation of individual transition planning, 2) implement state-level systems that track variables relevant to service planning, 3) expand the array of vocational and residential options, 4) develop strategies to reallocate resources for service expansion, and 5) planning to minimize competition between graduates of schools, people currently waiting for services, and institution leavers.

McDonnell, J., & Hartman, M. (1985). Planning the transition of severely handicapped youth from school to adult services: A framework for high school programs. Education and Training of the Mentally Retarded, 20, 275-286.

The problems that severely handicapped youth have in making the transition from school to work and to adult services are enumerated and described. Solutions to these problems are posed in the development of coordinated transition planning and individualized transition plans. The emphasis is placed on preparing parents to aid in the transition planning process.

McDonnell, J., & Horner, R. (1985). Effects on in-vivo versus simulation plus in-vivo training on the acquisition and generalization of grocery item selection by high school students with severe handicaps. Analysis and Intervention in Developmental Disabilities, 5, 323-343.

In the present study, high school students with moderate and severe retardation were trained to locate 15 grocery items through isolated in-vivo training and simulation plus in-vivo training. Isolated in-vivo training consisted of daily instruction in locating 15 target items in a single store located near the subject's school. Simulation plus in-vivo training included training with slides of grocery store aisles and shelves in the classroom plus training in a single store located near the student's school. Generalized responding was assessed through a multiple baseline design across subjects in three novel grocery stores and validated in a store frequented by the students' families. Results indicate that generalization was more likely when the range of stimulus variation in training examples was expanded via in class simulations. The results are discussed in terms of procedures for teaching generalization skills and guidelines that can be used by teachers for developing effective classroom-based simulations.

McDonnell, J. J., Horner, R. H., & Williams, J. A. (1984). Comparison of three strategies for teaching generalized grocery purchasing to high school students with severe handicaps. Journal of the Association for the Severely Handicapped, 9(2), 123-133.

Contrary to many teachers' asumption that classroom-learned behaviors will be transferred in natural settings by mentally retarded students, researchers found that simulation training did not result in correct performance in the naturally needed settings. Authors of this paper examine the issues involved in teaching severely handicapped high school students functional grocery shopping skills. The subject pool was 4 students who were trained in classrooms, a training store, and five probe grocery stores to use the "next dollar" strategy. Charts and results were prsented and discussed.

McDonnell, J., Wilcox, B., & Boles, S. M. (1986). Do we know enough to plan for transition? A national survey of state agencies responsible for services to persons with severe handicaps. Journal of the Association for Persons with Severe Handicaps, 11, 53-60.

This study was a survey of state agencies responsible for vocational rehabilitation, special education, and residential services to severely handicapped persons in the United States. A questionnaire was followed by a structured telephone interview. The procedures resulted in information on the number of severely disabled students graduating (over a 3-year period), the range and size of vocational and residential services, numbers on waiting lists, and increases in the services. Findings were that the number of graduating persons far exceeded the numbers represented in adult service

expansion plans. Several recommendations were made regarding transition planning and service development.

McEnrue, M. P. (1984). Perceived competence as a moderator of the relationship between role clarity and job performance: A test of two hypotheses. Organizational Behavior and Human Performance, 34, 379-386.

This study attempted to determine the effect of employee ability on the relationship of role clarity and job performance. Two competing hypotheses were tested: one which suggests that a less competent employee's job performance is less affected by role ambiguity and another which suggests that a more competent employee's job performance is more affected by role ambiguity. The latter hypothesis seemed to be supported by the results of this study. The authors suggest that until further research verifies this finding, employers could positively influence job performance by improving employee selection procedures as well as reducing role ambiguity for all employees.

McKinney, J. D. (1983). Performance of handicapped students on the North Carolina minimum competency test. Exceptional Children, 49, 547-550.

Factors associated with test performance and test administration procedures varied across handicapping conditions. EMR's had the lowest initial and re-test passage, and visual handicapped the highest. Issues related to test procedures and IEP's were discussed.

McLaughlin, T. F. (1976). Self-control in the classroom. Review of Educational Research, 46, 631-663.

Because of a recent trend to develop self-control procedures in school settings, the purpose of this article is to examine the applications of self-control procedures in the management of classroom behavior. This article is divided into categories which reflect the different uses of self-control procedures in classroom research. 1) examines the application of the various components of self-control as an intervention procedure. 2) discuss the use of self-control procedures to maintain behavior that has already come under the control of systematic reinforcement procedures. 3) evaluate the relative effectiveness of self-control as compared with other classroom intervention procedures. 4) the variables that appear to be related to the effectiveness of self-control are examined. (e.g. accuracy of self-recording, magnitude and density of reinforcement, delay of feedback, etc.). Finally, this article also presented the needs for future research on self-control procedures in regular and remedial classrooms. It is important that future researchers can establish self-control as an effective behavioral technique.

Mesch, D., Lew, M., Johnson, D. W., & Johnson, R. (1986). Isolated teenagers, cooperative learning, and the training of social skills. Journal of Psychology, 120, 323-334.

This study of 5 "isolated teenagers" is very confusing. They claim that these "handicapped" kids gained in academic and social measures. However, there are method and statistical concerns. We don't know who or how many non-handicapped students were involved in this eighth grade study. The definition of handicapped is limited and they tend to overgeneralize their results. Their statistical methods are suspect, e.g., the df don't fit.

Miguel, R. J., Hotchkiss, L., & Foulk, R. C., Jr. (1983). Effects of vocational education and work experience on the accuracy of youth perceptions of employer standards. Paper presented at the 1983 annual meetings of the American Educational Research Association. Ohio State University: The National Center for Research in Vocational Education.

This report of research on the discrepancies between employers' and high school students' perceptions of work behaviors. The authors hypothesized that exposure of high school students to vocational curriculum in school shortened the distance between the perceptions of the two parties. The sample consisted of high school students from 3 urban areas in various parts of the country (sample size was not mentioned). Another sample of 234 employers of students during the testing period was also drawn. A questionnaire of 150 items was taken by employers and a regression analysis run on responses. Findings included factors such as race and age having a significant effect on students' perceptions of work requirements. Limitations of generalizability of findings were discussed.

Miller, R. B. (1962). Task description and analysis. In R. M. Gagne (Ed.), Psychological principles in system development (pp. 187-228). New York: Holt, Rinehart & Winston.

This is one of the early influential step-by-step study of task analysis, covering the purposes of the task analysis and their relation to the process of the system and its components, the general rationale for task description within the framework of system development, the nature of task description, and the language it employs.

Minnesota Department of Education, Division of Instructional Effectiveness Special Education Section. (1986). Special education report to the 1986 Legislature: Special education section caseload study.

Minnesota has enacted legislation that eliminated special educations maximum case loads. The legislature also requested the State Department of Education to conduct a study to see if this change will provide more flexibility in individual districts without adversely effecting programs. This report is a

proposal for a study that is to be completed by February of 1987. The report includes an overview of the proposed study.

Mithaug, D., Martin, J., & Agran, M. (1987). Adaptability instruction: The goal of transitional programming. Exceptional Children, 53, 500-505.

This article describes an instructional model-adaptability instructional model, designed to teach employment adaptability skills to students with mild to severe learning needs. The ability to adapt to changes in work environments and maintain acceptable levels of work performance is critical for employment success. The model includes four major components: a) decision making, b) independent performance, c) self-evaluation, and d) adjustment to help students to adapt to environmental changes. Implications for transitional programming are addressed.

Mithaug, D. E. (1979a). Negative employer attitudes toward hiring the handicapped: Fact or fiction? Journal of Contemporary Business, 8(4), 19-26.

JCB sent a survey questionnaire to the Fortune 500 companies to assess employer attitudes toward hiring the handcapped; 43 responses were received. Generalization is limited because of the low response rate. The three questions addressed were: 1) What proportion of the employees of these companies is handicapped? 2) What types of handicapped persons are these companies most likely to consider hiring? and 3) What factors will affect a company's decision to hire a handicapped person? The two most influential factors were ability to perform the job and productivity.

Mithaug, D. E. (1979b). The relation between programmed instruction and task analysis in the prevocational training of severely and profoundly handicapped persons. AAESPH Review, 4(2), 162-178.

This article reviews the historical origins and influences of two major instructional approaches, task analysis and programmed instruction, in order to a) define the essential elements of each, b) identify important similarities and differences, and c) specify the functional relations that make programmed instruction and task analysis complementary components of an individualized training strategy. The article discusses the implications of these considerations by indicating that task analytic strategies and programmed instruction in combination are most valuable in training the specific job-related skills necessary for an imminent placement, while programmed instruction across different tasks may be most useful in developing career education plans and curricular sequences that train the generative vocational skills and worker behavior that apply to many tasks and job situations.

Mithaug, D. E., & Hagmeier, L. D. (1978). The development of procedures to assess prevocational competencies of severely handicapped young adults. AAESPH Review, 3(2), 94-115.

This paper extends and elaborates on discussion that indicated the need for basing pre-vocational training activities upon the requirements of job entry. By following the suggestion that the proper sequence for developing a pre-vocational program is first to analyze the requisites for entry into a job, then to assess the client's skill vis-a-vis those requisites, and finally to prescribe training objectives to reduce identified needs, this paper presents assessment data from 56 workshops, developmental centers, and activity centers in five northwest states that specify the requirements considered important for entry into sheltered employment. The subsequent data analyses yielded a pre-vocational assessment instrument (PAI) derived from the entry level requirement data, and corresponding pre-vocational objectives derived from the PAI. These analyses demonstrated: (1) the functional relation between job requisites, needs assessments, and training objectives and (2) that this relation can be empirically verified, i.e. the data emanating from an analysis of job requisites determine the nature and scope of the assessment instrument, which, in turn, determines which training objectives are appropriate for a particular client.

Mithaug, D., Hagmeier, L., & Haring, N. (1977). The relationship between training activities and job placement in vocational education of the severely and profoundly handicapped. AAESPH Review, 2, 89-109.

Developing a successful prevocational training program for the severely and profoundly handicapped is contingent upon a precise specification of the long-term objective, job placement. An assessment of the requirements for entry into the next job placement or training program is necessary. This paper provides 63 assessment items, and procedures, as a basis for evaluating individual client's strengths and weaknesses for a particular job. The client's assessment determines the appropriate prevocational training objectives, which in turn suggest the range of training activities that most probably relate to the target job.

Mithaug, D., & Hanawalt, D. (1978). The validation of procedures to assess prevocational task preferences in retarded adults. Journal of Applied Behavior Analysis, 11, 153-162.

Three severely retarded young adults between the ages of 19 and 21 years participated in a prevocational training program. The study attempted to assess each subject's preferences for the six tasks: collating, stuffing, sorting, pulley assembly, flour-sifter assembly and circuit-board stuffing. In phase I, the procedure consisted of randomly pairing each task with all other tasks in a two-choice situation that required the subjects to select one task from each pair combination to work for a seven-minute period. The 15

possible pair combinations were presented randomly every two days for a period of 34 days to determine the preferences. During phase II, each subject's last and most preferred tasks were paired separately with moderately - preferred tasks. The results showed that the choices for the moderately - preferred tasks decreased when consistently paired with the least - preferred task.

Mithaug, D. E., Horiuchi, C. N., & Fanning, P. N. (1985). A report on the Colorado statewide follow-up survey of special education students. Exceptional Children, 51, 397-404.

Addressing concerns that little information is available on post-school status of students with handicapping conditions other than mentally retarded youth, this follow-up study was established to obtain data on graduates' opinions of the impact of school experiences on their future. The target population was special education students graduating in 1978-1979. However, owing to various difficulties, the final sample (N = 234) included only those who could be located and were willing to participate. The research instrument sought information of 3 types: background, school, and post-school. Findings included: (1) ≤80% of respondents declared their major course of study to be vocational rather than college prep (20%); (2) 57% indicated that special and vocational education were very useful while only 39% felt that way about regular education; and (3) the persons viewed as most helpful in preparing respondents for the future were parents or relatives (78%), and the special education teacher (72%).

Mithaug, D. E., Horiuchi, C. N., & McNulty, B. A. (1987). Parent reports on the transitions of students graduating from Colorado special education programs in 1978 and 1979. Study commissioned by the Colorado Department of Education.

Since the 1970s, several major studies have been conducted investigating various problems in the transition process of handicapped youths, such as school experiences, employment, and independent living situations. However, the authors noted that the two major variables used in most studies are employment status and earnings, and the types of school programs from which these students exited. One neglected variable, the authors argued, was the role of parents and families in the transition process. Hence, this study investigated parental perceptions of their children's transition from school to work. 131 families were interviewed, each interview lasting from 1-3 hours. Questionnaires were analyzed, and results were tabulated. 20 findings were listed and discussed.

Mithaug, D. E., & Mar, D. (1980). The relation between choosing and working prevocational tasks in two severely retarded young adults. Journal of Applied Behavior Analysis, 13, 177-182.

This study investigated the relation between prevocational preference, as measured by the client's selection of a task object, and the work that followed that choice. After selecting a task object, the clients worked a task previously assessed to be more or less preferred than the one indicated by the object. The results indicated that when the selection represented a task that was less preferred than the one actually worked, choices for that object increased on subsequent trials. Conversely, when the selection represented a task that was more preferred than the task that followed object choices for the object decreased on subsequent trials. The work that followed object choices reinforced or punished subsequent selections. These findings indicated that the clients' object choices were valid indicators of their preference for working different tasks. They were also consistent with Premack's principle that one class of responses may reinforce or punish a different class of responses for the same individual.

Mithaug, D., Mar, D., Stewart, J., & McCalmon, D. (1980). Assessing prevocational competencies of profoundly, severely, and moderately retarded persons. Journal of the Association for the Severely Handicapped, 5, 270-284.

This report describes the use of an assessment instrument derived from survey data on job entry requirements to assess the prevocational competencies of moderately, severely, and profoundly retarded persons. The first study validates the assessment instruments by investigating the correspondence between what supervisors say is important for entry and the actual competencies of workshop clients. The results indicate that workshop clients have those skills specified in the assessment as being important for entry into sheltered employment. The second study uses the Prevocational Assessment and Curriculum Guide to assess the competencies of 179 profoundly, severely, and moderately retarded persons who were employed. The results indicate that while the moderately retarded group generally scored higher than the severely retarded, who in turn scored higher than the profoundly retarded group, all were well below the workshop expectations for entry. Finally, the assessment categories showing the greatest deficits across all three diagnostic groups are communication skills, independence, behavior, and grooming, eating skills. These findings suggest that much training will be necessary to prepare severely handicapped persons for sheltered employment.

Moises, M. G. (1985). Annual report: Trend College, Inc. project with industry (Unpublished Report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X, Seattle, Wa.

This report reviews the activities of the PWI for the first eight months of 1985. Trend College was established in 1975 and has provided services for 916 clients. Total unsubsidized placement equal 500. Services are provided to persons with a variety of handicapping conditions. Clients are considered to have severe disabilities. Of the 100 clients served thus far in 1985, only 17 were employed when they entered the program. Average weekly wage was $95. Average weekly wage after placement $147.15. This year, 62.5% of the projects net client load have been placed, with a six month retention rate of 41%. (This number may be skewed because not all placements have been employed six months.)

Moltz, R. R. (1985). Annual report: Interaction, Inc., Employment Services Division (Unpublished Report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

Interaction's Project with Industry is a comprehensive employment orientation/job club for handicapped adults who have some marketable skills. The purpose of the program is to help these individuals obtain suitable and meaningful employment in the competitive labor market. Services include intake and assessment, job club, group employment orientation, resume preparation, job development and placement assistance, individual and group employment counseling, support services, employer orientation, job retention assistance and follow-up.

Morocco, C. C., & Neuman, S. B. (1986). Word processors and the acquisition of writing strategies. Journal of Learning Disabilities, 19, 243-247.

Observations of 14 students with moderate writing problems while composing at the keyboard. Focus on the character of the instructional environment in which the computer is used. The article discusses how the accessibility of the child's writing process due to the large screen provides the teacher opportunities to help learning disabled children manage the complex cognitive and emotional demands of the writing process.

Morsh, J. E., Madden, J. M., & Christal, R. E. (1964). Job analysis in the United States Air Force. Personnel Psychology, 17, 7-17.

Report of procedures of the development of revised method of job analysis. The method centers on the use of the task inventory, while also including many of the more desirable features of the traditional methods. The use of job analysis data, statistical treatment, and special problems for future research are discussed.

Mulligan, M., Lacy, L., & Guess, D. (1982). Effects of massed, distributed, and spaced trial sequencing on severely handicapped students' performance. Journal of the Association of the Severely Handicapped, 7, 49-61.

During training cognitive and motor skills, the effects of massed, distributed and spaced trial sequencing were evaluated relative to performance. Eleven severely handicapped students in four isolated special education classrooms were involved. Correct, error, and refusal responses were monitored during three conditions of training: massed, distributed, and spaced trial sequencing. An overall comparison of the distributed and massed trial sequencing showed no difference in the mean level or the slope of the three types of responses. A comparison of distributed and massed trial sequencing showed only the superior effect of distributed trial sequencing for the mean level of responding. These findings were significant 1) for both correct and refusal responses for an overall comparison, and 2) for students living in the home rather than in an institution. The results of this study support the addition of distributed trial sequencing to the technology of instruction for severely handicapped learners.

Murphy, K. R., Garcia, M., Kerkar, S., Martin, C., & Balzer, W. K. (1982). Relationship between observational accuracy and accuracy in evaluating performance. Journal of Applied Psychology, 67, 320-325.

The authors conducted a laboratory experiment designed to determine the correlation between raters' accuracy in evaluating the performance of lecturers and the accuracy of the same raters in observing the frequency of specific behaviors. Forty-four undergraduate students were asked to evaluate the performance of four different lecturers on video tape and to count occurrences of certain behaviors. Their results were compared to the results of "expert" raters. Finally the ratings on both performance and observations were compared and found to be significantly correlated. The authors suggest that training in observational skills alone might increase overall evaluation accuracy.

Nadolsky, J. (1981). Vocational evaluation in the public schools: Implications for future practice. Journal for Vocational Special Needs Education, 3, 5-9.

This paper suggested that vocational evaluation, much like classroom teaching, is an educational service that belongs in the public school. Classroom teaching is designed to equip students with a knowledge base that is considered important to their functioning as independent adults, while vocational evaluation is concerned with enabling students to learn about themselves in relation to the act of working. This paper make a conclusion that vocational evaluation has emerged as an essential vocational guidance service for students who have special needs.

National Alliance of Business. (1986). Employment policies: Looking to the year 2000. Washington, DC: Author.

The authors forecast the key demographic and economic factors that will impact employment in the year 2000 and provide the framework and strategies for action toward development of policies that can best address the changes and challenges to come. Projections included a decreasing average level of education in workers, continuing increases in women in employment, changing job task requirements, and an increased emphasis on training. Recommendations pertained to the responsibility of federal and state government to articulate and support changing employment policies, the responsibilities of school to emphasize basic skills while increasing students' awareness of the work place, and the responsibilities of business to gear up for lifelong training.

National Association of State Directors of Special Education. (1985). Employment for persons with severe disabilities: Interagency strategies for expanding work opportunities (Report of a National Conference). Washington, DC: Author.

Conferees sought to identify methods of removing barriers to providing employment-related services and employment opportunities and to define strategies for collaboration by agencies and organizations to meet the continuing needs of students and adults with severe disabilities. Recommendations include: (1) the need for agencies and associations that work with people with severe disabilities to conduct a needs assessment to know the workplace market and get current data on employment needs and trends, meet with personnel managers, and conduct task analysis to determine the requirements of various jobs; (2) the need to develop marketing strategies directed to and including employers and business groups, unions, service providers, and parents; (3) the need for service providers to develop a marketing approach, using business terminology and language, to demonstrate that people with disabilities can help business by being relizble, loyal workers who can perform specific assignments on the job; and (4) the need for schools to teach job-related behaviors rather than specific job skills which can be learned on the job.

National Clearinghouse for Youth Studies. (1984). Youth Studies Abstracts, 3(4) [entire issue]. (ERIC Document Reproduction Service No. ED 250 541)

This issue contains 106 abstracts of publications in Australia, covering social and educational issues as well as educational program materials. Subject matter areas include: aborigines, policy and practice of education for handicapped as well as non-handicapped students, vocational training, and employment and retention of handicapped youth. Each abstract consists of complete citation and synopsis. Because this is the final issue of 1984, subject and author indexes are provided for all abstracts from November, 1981, to November, 1984.

National Clearinghouse for Youth Studies. (1985). Youth Studies Abstracts, 4(2) [entire issue]. (ERIC Document Reproduction Service No. ED 256 903)

138 abstracts of documents are included in this volume: 55 are reports dealing with social and educational issues and 83 are program reports, reviews, and evaluations. Some of the issues touched upon are: career education, students with disabilities, counseling credentials, vocational education and training, and higher education. Complete bibliographic information is provided for each citation.

National Clearinghouse for Youth Studies. (1985). Youth Studies Abstracts, 4(3) [entire issue]. (ERIC Document Reproduction Service No. ED 260 207)

169 abstracts of documents concerning educational programs were included in this volume, 97 of them dealing with social and educational issues while 56 discuss evaluation issues and 16 discuss instructional issues. Some of the topics and areas covered are: family, higher education, gender issues, diabilities, drugs, employment, international comparisons, migrant workers, affirmative action, and welfare. Bibliographic information is provided.

Nietupski, J., Hamre-Nietupski, S., Clancy, P., & Veerhusen, K. (1986). Guidelines making simulation an effective adjunct to in vivo community instruction. Journal of the Association for the Severely Handdicapped, 11, 12-18.

Article presents another view of in-vivo versus simulation training. Authors express view that simulation training be used as an adjunct to in-vivo when in-vivo alone is unfeasible. This article proposes 5 guidelines for the effective use of simulation: 1) inventory community settings to determine range of stimulus and response variations potentially facing students, 2) systematically vary simulations to provide sufficient range of training examples, 3) use community performance data to modify simulations, 4) use simulations to provide intensified practice in problems areas, and 5) schedule simulations to allow for sufficient in-vivo instruction and to provide simulations in close temporal proximity to in-vivo instruction.

Nihira, K., Mink, I. T., & Meyers, E. E. (1981). Relationship between home environment and school adjustment of TMR children. American Journal of Mental Deficiency, 86, 8-15.

The relationship between the home environment and school adjustment of 104 TMR children was examined. Assessment of home environment included measurement of environmental process variables with Caldwell's Home inventory and psycho-social climate with Moos, Insel, and Humphrey's Family Environment Scale. Certain child-rearing attitudes and relevant demographic characteristics were also investigated. Measures of school adjustment included the child's social

status, self-concept, and IQ and teachers' ratings of classroom behavior. Results revealed that specific factors of home environment were significantly related to the adjustment of TMR children in school, including (a) harmony and quality of parenting, (b) educational and cognitive stimulation available at home, (c) emotional support for learning, and (d) cohesiveness of family members.

Okolo, C. M., & Sitlington, P. (1986). The role of special education in LD adolescents' transition from school to work. Learning Disability Quarterly, 9, 141-155.

Article opens by stating OSER's 3 component view of transition: a) the high school foundation, b) employment opportunities, c) bridge between the first two components. Article covers: a) brief review of recent studies of LD individuals vocational adjustment, b) identification of types of skills needed for successful transition to work, c) discussion of current practices in vocational programming for LD adolescents, d) suggestions of most appropriate roles for secondary special educators in transition process, and e) identification of implications of these roles for personnel preparation and future research activities.

O'Leary, S. G., & Dubey, D. R. (1979). Applications of self-control procedures by children: A review. Journal of Applied Behavior Analysis, 12, 449-465.

Self-control procedures as used by children to affect their own behavior were reviewed. Particular emphasis was placed on self-instruction, self-determined criteria, self-assessment, and self-reinforcement. Self-punishment, comprehensive programs, and innovative self-control procedures were also evaluated. Basic effectiveness, comparisons with similar externally imposed interventions, maintenance, and the augmental value of the procedures were assessed. Important problems for future research were identified.

Oliver, P. R. (1983). Effects of teaching different tasks in group versus individual training formats with severely handicapped individuals. The Journal of the Association for the Severely Handicapped, 8(2), 79-91.

An alternating treatments design was employed to compare the effectiveness of two group-training formats relative to individual training in teaching three severely handicapped adults to identify Bliss symbols. In one group format each individual learned the same symbols; whereas each learned different symbols in the other group format. Results indicated either equivalent or faster acquisition in group training than in individual training only when the same symbols were taught to each group member. When different symbols were taught to each member of the group, acquisition was slower than during individual training. Each student also demonstrated observational learning

of some symbols being taught to other members of the group. Results are discussed in terms of their implications for using group training as a practical and efficient alternative to individualized instruction in classroom situations.

Ollila, L. O., Collis, B., & Yore, L. D. (1986). Predicting first-grade students' writing achievement using the Canadian Readiness Test and selected measures of cognitive development. The Journal of Educational Research, 80, 47-52.

Studies the relationship of reading readiness, as measured by the CRT, and cognitive development, as measured by 6 Piagetian tasks of conservation, sequence, and horizontal/vertical reference frames, as predictors of writing achievement at the end of first grade, as measured by both holistic and syntactic evaluation of writing samples. The only significant association between any of the writing variables and any of the cognitive development variables occurred between the holistic writing score and seriation of length. The holistic score was significantly related to all of the CRT variables as well as 5 of the 6 syntactic variables. The CRT subscales were significantly intercorrelated while the cognitive development variables were minimally intercorrelated.

O'Reilly, C. A., III, & Roberts, K. H. (1975). Individual differences in personality, position in the organization, and job satisfaction. Organizational Behavior and Human Performance, 14, 144-150.

The authors state that there is a dearth of evidence to support the notion that individual traits are a progenitor to job satisfaction. They refer to several articles that demonstrated a relationship between job attitudes and organizational structure. The intent of the study was to assess the differential relationships of two sets of variables (individual traits and organizational structure) with job satisfaction. Job satisfaction was measured with the Cornell Job Descriptive Index. Measures of job-related individual traits were obtained from the Self-Description Inventory. Three structural characteristics were identified. The authors determined that job satisfaction is significantly related to both personality and structural attributes. They conclude that if attitudes about the work environment are determined by organizational structure, there are substantial implications for understanding phenomena such as worker alienation and organizational commitment.

Owen, D. E. (1984). Profile analysis: Matching positions and personnel. Supervisory Management, November, 14-20.

The author designed a model that could be used by employers to match employees with positions. Using a detailed job analysis combined with the required level of knowledge and/or skills for a specific job, an employer can

graphically construct a job profile. The employee's profile developed from the usual information sources: resume, application, and interview, can also be graphically portrayed and overlain on the job profile to evaluate the fit ofthis employee with a particular job. A decision to hire or to transfer an employee can then be made on less subjective factors. Data bases that describe profiles for specific occupations could conceiveably enhance this process.

Owings, J., & Stocking, C. (1985). High school and beyond. A national longitudinal study for the 1980s: Characteristics of high school students who identify themselves as handicapped. Washington, DC: U.S. Department of Education, National Center for Educational Statistics.

Data for this report was taken from high school and beyond, a longitudinal study following high school seniors and sophomores. The report deals with data on service populations, incidence rates and prevalence rates (see definitions). It also uses data from other studies. Variables include: number of students identified as handicapped, prevalence of specific handicaps, grades and academic testing results, level of educational attainment, attitudes, psychological testing, sex, and race.

Palinscar, A. S. (1986). Metacognitive strategy instruction. Exceptional Children, 53, 118-124.

Discusses the effects of the metacognitive instruction, reciprocal teaching, on junior high students enrolled in remedial reading classes. Tests of reading comprehension conducted in social studies and science classes indicated that students' improvement generalized to these settings as well. Palinscar suggests that scaffolded instruction should be used to empower students in order to achieve the greatest gains from metacognitive instruction.

Palmer, G. J., Jr., & McCormick, E. J. (1961). A factor analysis of job activities. Journal of Applied Psychology, 45, 289-294.

A preliminary and probing effort to develop a check list of job activities of a worker oriented nature, to use these in describing a sample of jobs, and to subject the results to factor analysis to attept to identify the worker activity "dimensions" of the jobs in question. The author, after the study, concluded that the results tended to support the view that work activities could be identified or measured and the variety of human work activities may be organized with greater simplicity and economy in terms of a smaller number of relatively independent dimensions.

Palmer, K. A. (1983). A comparison of high and low socioeconomic parents of handicapped students on measures of knowledge and assertive attitude related

to due process. Unpublished doctoral dissertation, University of Kansas, Lawrence.

To ensure that handicapped children from all socioeconomic backgrounds have an equal chance of receiving an appropriate education, it was necessary to establish whether differences between the high and low SES parents existed in knowledge of due process rights, attitudes toward asserting due process, and satisfaction of their child's educational placement. The study was conducted in the public schools of a large metropolitan area in the Midwest. Two hundred high and 200 low parents of students evidencing a specific learning disability, behavior disorder, on mental retardation were selected from the computer rosters of approximately 3,500 students. High and Low students were determined through the uses of demographic maps of the greater metropolitan area depicting five income levels. All special education facilities serving the three basic handicapping conditions were divided according to the five income groups and assigned an SES number. High SES subjects were selected by identifying all eligible students in the programs 1/2 lists. Low SES subjects were randomly selected from programs on SES 5 lists. Each subject was mailed the research questionnaire and an explanation cover letter. The final sample consisted of 72 parents, 40 high and 32 low parents. The analysis of variance revealed that no statistically significant differences existed between the high and low SES parents on due process, attitudes toward asserting due process, and consumer satisfaction. These findings suggested that knowledge of due process may not determine utilization of those rights. Further, in principle, high as well as low SES parents believe it was beneficial to hold positive attitudes toward using one's rights. Finally, high as well as low SES parents are unhappy with the due process hearing option as a means of challenging the schools' action or inaction concerning their child.

Pancsofar, E., & Bates, P. (1985). The impact of the acquisition of successive training exemplars on generalization. Journal of the Association of the Severely Handicapped, 10, 95-104.

This investigation contains an analysis of three generalization effects after the acquisition of one or more training exemplars by students with severe to profound levels of mental retardation. Specifically, generalization across settings, for exemplars with variations and exemplars with response variations, was assessed following the acquisition of a pre-established sequence of training exemplars. General results indicated that following the acquisition of one or two exemplars from any single group of similarly operated soap dispensers, generalization occurred 100%, 62%, and 0% across settings, for exemplars of varying stimulus features and for exemplars of varying response features, respectively. After one or two exemplars from two groups of similarly operated soap dispensers had been acquired, generalization occurred 100%, 100%, and 50% across settings, for exemplars of varying stimulus features and for exemplars of varying response features,

respectively. Implications of selecting training exemplars for students with severe handicaps are discussed.

Parent, W. S., & Everson, J. M. (1986). Competencies of disabled workers in industry: A review of business literature. Journal of Rehabilitation, 52(4), 16-23.

A computer search of business and trade journals from the last 10 years revealed 63 articles with the descriptors disabled, handicapped, or mentally retarded and competitive employment, cost effectiveness, or targeted jobs tax credit. Of these, 13 articles were selected for review. From the articles reviewed, implications and suggestions are made, both for employers and rehabilitation professionals, for: a) increasing the number of competitively employed individuals with disabilities and b) insuring a smooth transition from rehabilitation services to meaningful employment opportunities.

Paris, S. G., & Oka, E. R. (1986). Children's reading strategies, metacognition, and motivation. Developmental Review, 6, 25-56.

Experiment to determine (a) if children's reading comprehension could be enhanced with the provision of metacognitive knowledge about effective strategies and (b) if the information could be conveyed to students by their regular teachers as an adjunct to their usual reading curricula. Did not increase children's scores on self-perception or on a general reading ability test but did on a cloze test, an error detection test, and a test of awareness of comprehension strategies.

Pati, G. C., & Adkins, J. I., Jr. (1980). Managing and employing the handicapped: The untapped potential. Illinois: Brace-Park Press.

This book looks at the employment of the handicapped people from the employers' perspectives. In the 4th Chapter, a job analysis technique was discussed. Several points that should be considered are raised, one of them being the ever changing nature of jobs should be matched with a periodically modified job analysis.

Patton, P. L. (1981). A model for developing vocational objectives in the IEP. Exceptional Children, 47, 618-622.

Since 1977 the MDWES has been incorporated into 120 school settings in the country and 267 school personnel have been formally trained in the use of the MDWES as a vocational development model for handicapped youth. The MDWES is designed to: 1) describe the individual's abilities and limitation in cognitive, emotional-coping, and sensorimotor functions, 2) provide predictive information regarding vocational competency and work potential, 3) suggest appropriate strategies for education and vocational rehabilitation, 4) provide information useful in predicting the individual's response potential to an

educational and vocational rehabilitation program. Five variables as most likely to predict vocational competency and assessed in the MDWES vocational development evaluation process are: 1) verbal cognitive ability, 2) sensory skills, 3) fine and gross motor skills, 4) emotional adjustment, 5) integration coping. These five factors measured by the MDWES are arranged in specific hierarchies at each level of vocational competency. This hierarchical model is a useful concept when prioritizing annual goals in the IEP. Examples have been presented(in this paper) using MDWES data to generate vocational goals and objectives.

Payne, J. S., & Chaffin, J. D. (1968). Developing employer relations in a work study program for the educable mentally retarded. Education and the Training of the Mentally Retarded, 3, 127-133.

The authors discuss the approach used to develop employer relations in a senior high work study program. In developing a relationship with a prospective employer of the handicapped: 1) be honest in describing the handicapping condition; 2) involve the employer in the training; 3) sell the employer a program not a product; 4) lead the program with a good worker as the employer's first trainee; 5) reinforce the employer's interest by reporting changes; and 6) give the employer support for a job well done.

Pearlman, K., Schmidt, F. L., & Hunter, J. E. (1980). Validity generalization results for tests used to predict job proficiency and training success in clerical occupations. Journal of Applied Psychology, 65, 373-406.

Presentation of the first large-scale test of Schmidt and Hunter's Bayesian validity generalization procedure, which was applied to 56 distributions of validity coefficients drawn from 698 published and unpublished studies representing 5 clerical job families, 10 test types, and 2 classes of criteria--job proficiency and training success. Results showed that most of the between-study variation in empirical validity results was accounted for by 4 statistical artifacts, thus casting serious doubt on the traditional belief that employment test validities are situationally specific. It was also found that in most cases generalization of validity to similar clerical jobs or new settings was justified, even where the hypothesis of situational specificity could not be rejected with certainly. Further, validity generalization could be supported based on corrections for sampling error alone. The correlation between mean test type validities for proficiency and training criteria was found to be high, indicating that contrary to previous belief, similar ability measures are predictive of both criterion types.

Peters, J., Templeman, T., & Brostrom, G. (1987). The school and community partnership: Planning transition for students with severe handicaps. Exceptional Children, 53, 531-536.

The purpose of this article is to describe a process to provide solutions to the prevalent problem of interagency collaboration in planning for transition outcomes. The project was designed to span 3 years and involve seven sites throughout Oregon. The seven sites were selected differently according to the numbers of students being served within the special education program, rural versus urban, and availability of a range of adult service options. A series of training and follow-up activities were planned for developing each site through three project phases: a) awareness level training, b) skill level training, c) trainer level training. Results suggest the procedures in facilitating development and implementation of transition planning effort. Those procedures are a) locally generalized plans; b) an outside stimulus to initiate the collaborative effort; c) transitions teams empowered with policy-level decision making; and d) follow-up technical assistance at the administrative and direct service level.

Peterson, M., & Peterson, D. (1986). Assessment: A resource in vocational instruction of special needs students. The Journal for Vocational Special Needs Education, 8(2), 13-16.

This article is intended to identify the potential ways in which vocational assessment can assist instructional processes and to describe a program that actually demonstrates this potential. 1) Vocational assessment should be instructional relevant - student development outcomes in vocational assessment may include: a) improved and increased motivation for education, b) improve understanding of the relationship between educational experiences and future vocational opportunities, c) skills for making wise educational and vocational choices, d) increased understanding of personal values, interests, skills, and deficits as they relate to the world of work. 2) Vocational assessment is not a one-time occurrence. On-going informal curriculum-based vocational assessments should start in elementary schools with referral to more intensive, formal vocational assessment/evaluation centers occurring normally at age 14-15.

Peterson, M., & Housley, W. (1982). Entry skills needed for special needs students in vocational programs. The Vocational Guidance Quarterly, 31, 149-152.

Vocational counselors are increasingly being asked to help make recommendations for entrance of special needs students into vocational education programs. Needed entry level skills and teaching style information vary greatly between different vocational programs and a procedure that will aid vocational counselors in providing effective vocational guidance for

students with special needs. Steps to follow in designing criteria for entrance and subsequent teaching styles are also discussed.

Petty, R. E., Harkins, S. G., & Williams, K. D. (1980). The effects of group diffusion of cognitive effort on attitudes: An information-processing view. Journal of Personality and Social Psychology, 38(1), 81-92.

This study of 180 undergrads examined the effects of groups on two cognitive tasks. Individuals evaluated good performance better and poor performance worse than members of groups. The group responsibility for evaluation of performance of therapy or essays resulted in less effort and involvement than the individual condition.

Piper, M. C., & Ramsay, M. K. (1980). Effects of early home environment on the mental development of Down syndrome infants. American Journal of Mental Deficiency, 85, 39-44.

Changes in mental development, as assessed with the Griffiths Mental Developmental Scales, of 37 Down syndrome infants over a 6-month period were correlated with scores obtained on the Home Observation for Measurement of the Environment (HOME) Inventory. Three HOME Inventory subscales, Organization of Physical and Temporal Environment, Opportunities for Variety in Daily Stimulation, and Maternal Involvement, were significantly related to the Griffiths Personal-Social Scale. A stepwise discriminant analysis composed of three subscale scores from the HOME Inventory (Organization of Physical and Temporal Environment, Provision of Appropriate PLay Materials, and Maternal Involvement) differentiated the infants into two groups according to the degree of decline in the total developmental quotient. The minimal decline group was associated with a better organization of the physical and temporal environment. Scores on the HOME Inventory obtained in infancy can be used to help predict the amount of decline in measured mental functioning in Down syndrome infants.

Plisko, V. W., & Owings, J. (1982, March). Defining, counting, and characterizing handicapped students in the nation's high schools. Paper presented at the Annual Meeting of the American Educational Research Association, New York. (ERIC Document Reproduction Service No. ED 223 036)

The paper reported on a national survey which included data on handicapped students in U.S. high schools, as part of a longitudinal study of 58,270 high school students. Findings are described from student self-reports and teacher checklists on the existence of specific conditions (for students, learning disability, hearing impairment, speech disability, orthopedic handicap or other health impairment; and for teachers, physical or emotional handicap). Results are discussed regarding the prevalence of handicaps (teachers were

more likely to identify students as handicapped than were students to report themselves); sexual, racial, and socioeconomic characteristics of handicapped students, and agreement among the handicap indicators. Observations made from the data included that only a portion of the students who repoted a handicap had participated in special education programs; that a larger percentage reported a specific disability than claimed a physical limitation; and that handicap indicators identified similar groups of students although they seldom identified the same individuals.

Plue, W. V. (1984). Employment patterns of the mildly retarded. The Journal for Vocational Special Needs Education, 7(1), 23-27.

This study determines the kinds of jobs mildly retarded individuals are involved in, and explore factors that may be useful for educators who develop curricula for the population. The study reports that the employment pattern of the EMR sample are as follows: a) service occupations 25-27% (food & beverage preparations, includes cutting, packing, services, etc., custodial, cleaners, household services), b) structural work 14-18% (construction, assembling, installing, etc.), c) miscellaneous 14-15% (packaging, loading, storing), d) bench work 13% (painting, textile repair), e) processing operations 11% (wood products, processing chemicals, paper). These actual employments indicate the jobs are generally unskilled or semi-skilled work. The employment is common across this population and consistent over a six-year period. Several commonalities are related to these jobs: 1) verbal language is highly important (interactive with peers/workers), 2) motor ability (motor speed, tool use, assembly, matching, etc.), 3) strong social interaction (consistency, respect, dependability, reliability), 4) job hunting job changing skills are necessary for seasonal jobs. Education needs to strongly consider content variables associated with employment patterns of retarded individuals.

Polloway, E., Smith, J. D., & Patton, J. (1984). Learning disabilities. Learning Disabilities Quarterly, 7, 179-186.

The nature of learning disabilities in adulthood is examined in relation to theoretical models and research related to adult development. This approach is offered as an alternative to the practice of conceptualizing learning disabilities as primarily reflecting the persistence of childhood disorders into adulthood. The basic assumptions of a life span developmental approach are presented, and specific mediating variables influencing adaptation to significant life events are discussed. Recent research on disabled adults is reviewed in terms of its relevance to adult development with an emphasis on a new conceptualization of learning disabilities in adults. Implications are drawn for future research and intervention directions.

Prasse, D. P., & Reschly, D. J. (1986). Larry P.: A case of segregation, testing, or program efficacy? Exceptional Children, 52, 333-346.

The premier case involving bias in intelligence tests and placing children in programs for the mildly retarded is discussed. Larry P. v. Riles was a class action law suit involving disproportionate placement of minorities in classes for the educable mentally retarded in the State of California. The article provides a back-drop for initiation of the case and outlines the specific findings and remedies. The underlying implicit and explicit issues which were central to the judicial proceedings are discussed.

Prien, E. P. (1977). The function of job analysis in content validation. Personnel Psychology, 30, 167-174.

A comparison of the validity and reliability of two methods of task-analysis, one being worker-oriented, another task-oriented. The worker-oriented approach is said to be based on the of a finite set of dimesions--a taxonomy of aptitudes, abilities and characteristics, while its data is more vulnerable to contamination and/or being insufficient than task-oriented job analysis data; the task-oriented approach, in contrast, embraces items that usually describing the work activities of a family jobs. But the reliability data for task-oriented job analysis is far less impressive. It is suggested that both methods be used in possible situation.

Prien, E. P., & Ronan, W. W. (1971). Job analysis: A review of research findings. Personnel Psychology, 24, 371-396.

This is a comprehensive review of the research findings of the job analysis literature from Barnard (1938) to as late as 1969. The review covered the historical, cultural, and societal etiological determinants of what constitute work. There are five sections dealing in details with methodological approaches, job function taxonomies, results and future development of the job analysis.

Public Law 98-221 (S. 1340). (1984, February 22). The Rehabilitation Amendments of 1984.

These are proposed amendments to the Rehabilitation Act of 1973. They recommend the following changes in the PWI program: (1) The inclusion of designated states as recipients of PWI grants. (2) The requirement that PWI submit yearly descriptions of evaluation plans that at least reflect the following; number and types of persons with handicapping conditions served, types of assistance provided, source of funding, extent to which the employment pattern and economic status of a client changed, and a recorded of the extent that collaborated agreements have been developed. (3) The development of standards to evaluate the effectiveness of existing PWIs. (4) The National Council for the Handicapped must approve all proposed standards.

and (5) Funding for those project in existence will continue unless RSA determines that there is a substantial failure to comply with the agreement.

Ragosta, M., & Kaplan, B. A. (1986). A survey of handicapped students taking special test administrations of the SAT and GRE. Studies of Admissions Testing and Handicapped People.

This study examines responses of person with handicapping conditions to test accommodations for SAT and GRE's. The report discusses survey limitations such as low return rate and small subgroups. The questionnaire was developedto evaluate test accommodation for disabled people and to obtain additional information on the kinds of disabilities that make up four catagories of handicap. (Hearing impaired, physically handicapped, learning disabled and visually impaired) Types of accommodations and differences within groups are discussed. The report concludes that most test takers were satisfied with accommodations. Complaints were covered extensively, they included the test itself and time and space accommodations.

Rahm, K. (1985). Developmental disabilities master plan for 1985-91 and beyond. Executive Summary for 1985-91 and beyond. Olympia, WA: Department of Social and Health Service, Division of Developmental Disabilities.

This report provides a brief history of DDD efforts, statement of current objective and a summary of services provided for the just under 12,000 severly developmental disabled individuals. The agencies objective is to meet basic needs, habilitation and help persons live more independent lives. To meet this objective the plan identifies nine initiatives; 1) individual planning (IEP concept), 2) increased support to persons living with their families, 3) better management of behavioral problems that are the main cause of unplanned out of home placements, 4) meeting the increasing demand for community residential assistance (by 1991 estimated need for 950-1,010 additional commintyresidences), 5) continued appropriate use of residential habilitation centers, (RHCs), 6) Habilitation for every client, 7) habilitation, residential and case management programs will be administered by their actual benefits to clients, 8) strengthening case management (staffing - current case load is 140:1, should be 35:1), and 9) developmental environments for person now living in nursing homes (most of the 770 DDD clients living in nursing homes do nothave habilitation programs. Twenty percent should be in residential care programs.) The report includes projected costs for implementation of the plan. ($172.4M over six years, + $33.1M/yr to maintain the program.)

Randhawa, B. S. (1978). Clustering of skills and occupations: A generic skills approach to occupational training. Journal of Vocational Behavior, 12, 80-92.

The author attempted to determine the generalizability of clustering occupational skills in order to plan curriculum and efficient training procedures that would encompass more than one occupation. One hundred sixty-four skills were identified: of these skills, 38 cut across occupations. A sample of 37 occupations from three different locations in Canada was studied. Nine relatively homogeneous occupational clusters were identified. It was suggested that training for those occupations that had highly correlated skills requirements could be jointly provided. In addition, curriculum could be arranged in small blocks for job-specific skills and in larger blocks for core skills.

Redkey, H. (1975). A way of looking at sheltered workshops for the 1970's. Stout, WI: University of Wisconsin Department of Rehabilitation and Manpower Services. (ERIC Document Reproduction Service No. ED 131 185)

This is a collection of research reports on sheltered workshops in five European countries (Denmark, the Netherlands, Poland, Sweden, and West Germany) and the U.S. Sheltered work programs and services in these countries were studied in depth, focusing on information of population, funding, applicable findings, andtrends. One of the major findings was that when sheltered workshops took on the role of employment provider, they also assumed a number of responsibilities for the workers they employed, such as payment of adequate wages, provision of training, safety, and health care. These responsibilities resembled those of employers in the competitive job market.

Reid, D. H., Parsons, M. B., McCarn, J. E., Green, C. W., Phillips, J. F., & Schepis, M. M. (1985). Providing a more appropriate education for severely handicapped persons: Increasing and validating functional classroom tasks. Journal of Applied Behavior Analysis, 18, 289-301.

The purpose of this study was ato evaluate a program for increasing the involvment of severely handicapped adolescent and adult students in functional educational tasks in classroom settings (experiment 1). A second purpose was to use information generated in experiment 1 to socially vlaidate the criteria used to determine functional versus nonfunctional educational tasks (experiments 2 and 3). The program, consisting of a brief in-service followed by supervisory prompts and feedback, was accompanied by large increases in functional tasks in three classrooms. In two subsequent experiments, surveys provided social validation for the criteria for functional versus nonfunctional tasks in that: a) relevant individuals reliably categorized functional tasks as representing typical living, work, social, and leisure situations and b) experienced clinicians consistently rated tasks previously

categorized as functional as being more useful for severely handicapped persons than tasks categorized as nonfunctional.

Reubens, B. G. (1986). Adult education and training in Western European countries (Report No. RR-86-02). Washington, DC: National Commission for Employment Policy. (ERIC Document Reproduction Service No. ED 263 405)

This research report on adult education policies and practices of Western European countries offers potentially useful leads for U.S. policymakers, such as identifying special groups and problems, wider access, provision of information, counseling and evaluation, etc.

Reynolds, W. B. (1984). Remarks before the Paralyzed Veterans of America, Disability Rights Conference. Washington, DC. (ERIC Document Reproduction No. ED 242 851)

This speech by the Assistant Attorney General in the Civil Rights Division of the Department of Justice describes current efforts to enforce section 504 of the Rehabilitation Act of 1973, and other federal suits protecting the rights of disabled people in America. The Supreme Court case ofConsolidated Rail Corp v. Darrone4 in which the government forbids employment discrimination in all federally assisted programs, plus its role in protecting the rights of handicapped infants in the Baby Jane Doe case are cited. The Division's preparation of rules for implementation of Section 504 is the Department of Justice and its other Executive agencies are described. The speaker also discusses the challenge by disability rights groups to the regulation which stated that the Dept of Justice need not take measures that would result in a "fundamental alteration in the nature of its programs and activities or in clarification of the regulation via a Supplemental Notice with six "principles of interpretation": The development of a Uniform Federal Accessibility Standard (USAF) for buildings is cited, as are other activities on behalf of the disabled.

Rhodes, L. E. (no date given). Industry based structure employment: An option for severely handicapped people. Unpublished manuscript, University of Oregon.

The author explores the potential of enclaves to increase the employment of severely handicapped individuals in integrated settings and describes the components and benefits of such employment. Current services within sheltered workshops are limited, and unsupported competitive employment, though offering the greatest opportunity for full wages and benefits in the most integrated environment with nonhandicapped people, is inappropriate for those unable to maintain the speed or quality of nonhandicapped workers. Enclaves represent an alternative. Supervision and training for handicapped workers are provided within an industry setting, and employment objectives are sustained over time.

Rhodes, L. E., & Valenta, L. (1985). Industry-based supported employment: An enclave approach. Journal of the Association for the Severely Handicapped, 10(1), 12-20.

The authors describe the production line enclave that works at Physio Control. They found that most individuals labeled severely handicapped remain unemployed in segregated institutions, activity programs, and work activity centers despite repeated demonstrations of vocational competence. This discrepancy presents a challenge to create alternatives to current services that will provide employment benefits and job security to individuals within the least restrictive environment possible. This article describes a program model that provides ongoing supported employment within a normal industrial setting to six persons previously judged to have severe handicaps. After 1 year, employees have dramatically increased earnings and productivity over previous earnings and productivity

Richmond, G. (1983). Comparison of automated and human instruction for developmentally retarded preschool children. The Journal of the Association for the Severely Handicapped, 8(3), 78-84.

The purpose of the present study was to compare automated instruction with human instruction to teach a visual discrimination. Twenty developmentally retarded preschool children were trained on two discriminations with human instruction. With trials to criterion as the dependent variable, the results showed human instruction significantly better than automated instruction. Nine children did reach criterion for both discriminations with automated instruction and therefore showed they could learn a discrimination without the necessity of human interaction. These results are discussed in terms of the value automated instruction may have for classroom instruction with the developmentally retarded student.

Robertson, J. (1985). Annual report: S.L. Start and Associates, Inc (unpublished report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

The Greater Columbia Basin/Inland Empire Jobs Project is a partnership with labor, industry, and D.V.R. providing evaluation, training, and placement services within private industry to individuals with disabilities. Services are offered at a number of geographic locations, to individuals with a variety of disabilities. The project boasted an 89% 6-month retention rate for 1985. Delays in receiving allocated funds hampered the project's ability to meet expected placement and service goals.

Rock, D. A., Bennett, R. E., & Kaplan, B. A. (1985). The internal construct validity of the SAT accross handicapped and nonhandicapped populations. Report No. 4: Studies of admission testing and handicapped people project.

Princeton, NJ: Educational Testing Service, College Entrance Examination Board & Graduate Record Examinations Board.

The researchers tested the comparability of SAT verbal and mathmatical for one nonhandicapped and nine handicapped groups. A simple two factor analysis was used. This approach provided a reasonable fit in all populations. However, the nerbal and mathmatical factors tended to be less correlated in handicapped groups. The author conclude that this could be the result of independent achievement growth in one area. This phenoomena can be explained by a varity of factors including selection bais, conditions unique to the handicapping condition and the focus of the special education program. The results also suggested that the antonym item was measuring something other than general verbal reasoning abilitiy. This was particularly true for students with learning disabilities that used cassettes. A similar, yer less pronounced was found to exist on the reading comprehension item for students with LD. Students with LD using cassettes

Romer, D., & Heller, T. (1983). Social adaptation of mentally retarded adults in community settings: A social-ecological approach. Applied Research in Mental Retardation, 4, 303-314.

Evidence regarding the social networks of mentally retarded adults in community settings is reviewed. These networks appear to be widespread and consist primarily of peers. The social ecology of community settings is a critical factor in the development and maintenance of these networks. Given the considerable importance of such networks to the social support of of nondisabled adults, the furtherance of peer support among mentally disabled adults appears to be a desirable goal. Some approaches to achieving this goal were suggested. Careful consideration of the social ecology of community settings for mentally disabled adults may usefully supplement individual social skills training as a method for improving social adaptation to community life.

Ronan, W. W., & Day, G. J. (1981). JSAS job dimensions and multiple performance criteria. Catalog of Selected Documents in Psychology, 11(2), 41.

After a brief review of job analysis literature from as early as 1940s to 1970s, the paper considers personnel research studies to be representative of the type of work done and problem raised in all psychologocal research dealing with performance prediction. In studying the predictability of job performance, the main concern appeared to be the reliability of evaluation of job performances with only one criterion. It is hoped that analysis of dimension task measures as sets/factor analyses are to become eventually a single measure for a dimension since the required behaviors are "similar" and the study implied that single scores for dimensions are feasible. There are reasons to believe, according to the author, the descriptive factor analysis

of work performance along with those of job analysis research are forceful indicators of the complexity of work performance. However for some reason, the factors obtained are usually fewer in number that the dimensions shown by job analyses such as CIT or PAQ data. The data presented in the study suggest a minimum of 5 dimensions for almost every job and assuming adequate measurement coverage, up to at least 50 dimensions in the more complex jobs. The independence of job dimensions, the study demonstrated, points to the requirement of multiple criteria as essential in the evaluation and better understanding of work performance.

Rooney, K. J., Hallahan, D. P., & Lloyd, J. W. (1984). Self-recording of attention by learning disabled students in the regular classroom. Journal of Learning Disabilities, 17, 360-363.

This study investigated the adaptability of the self-monitoring procedures on learning disabled students in regular classroom settings. In the first part of the study, an ABAB design was used. Treatment consisted of having each member of an entire class of second graders monitor his/her own attending behavior. Self-recording method - the teacher gave the children the self-recording sheets and placed a tape recorder at the side of the room. She instructed children to ask themselves, Was I paying attention?, whenever a tone sounded on the tape recorder. She then told them to put a check in the yes box if they were paying attention. Data from 4 target students (LD) indicated that the procedure was effective in increasing attending behavior. In the second part of the study, a reinforcement contingency was added to the self-monitoring intervention to ensure that children were actually using the self-monitoring system. Even higher levels of on-task behavior resulted when reinforcement for adherence the the system was in effect. The results show that self-monitoring procedures are readily adaptable for use by learning disabled pupils in the regular classroom setting and that using self-monitoring procedures correctly is an important variable to consider when implementing them.

Rorick, A. A. (1985). Writing computer lessons. The Physiologist, 28(3), 173-177.

This is an instructional article directed toward teachers who would like to program computerized lessons for their classes. The article discusses some of the problems confronted by course-work writers. Suggestion on how to overcome these problems and sample solutions are provided.

Rosenbaum, M. S., & Drabman, R. S. (1979). Self-control training in the classroom: A review and critique. Journal of Applied Behavior Analysis, 2, 467-485.

The following components of self-control are reviewed in the article: self-recording, self-evaluation, self-determination of contingencies, and self-

instruction. Self-control strategies designed for the maintenance of appropriate classroom behavior, and issue associated with self-control training such as the reliability of self-observation, response maintenance, generalization, and the role of external control are examined. The results reviewed suggest that several steps should be followed to maximize t he potential effectiveness of self-control training in the classroom: a) students should be taught self-observational procedures, b) accurate self-observation can be prompted by initially requiring student to match their records with those of the teacher followed by gradually fading the matching process, c) once self-observation has been established, externally administered contingencies for desirable behavior change can be introduced, d) the control of these contingencies can be transferred to the students, e) students can be taught to provide themselves with instructions and praise designed to guide their behavior, and f) when students are reliably controlling their academic and social behavior, explicit contingencies can be gradually withdrawn.

Ross, D., & Ross, S. (1973). Cognitive training for the EMR child: Situational program solving and planning. American Journal of Mental Deficiency, 78, 20-26.

Two studies were conducted to evaluate the efficiacy in situational problem solving and planning. The 6-week programs were presented within the context of small group discussions, table games, and craft activities. The specific training procedures used included intentional training, direct and vicarious reinforcement, peer modeling, and brainstorming. In both studies the Experimental groups' post-test scores were far superior to those of the control groups'. The results suggest that there is an important experiential component in the EMR child's deficit in cognitive skills and provide strong support for the efficacy of early intensive cognitive training.

Roueche, J. E., Baker, G. A., & Roueche, S. D. (1984). College responses to low-achieving students: A national study. American Education, 31-34.

The authors survey all 2,508 two and four year institutions of higher education in the United States. Fifty-nine per cent, (1489), returned the survey. One hundred and twenty reported no remedial programs. Authors personal knowledge questions if this is accurate. Almost all institutions with programs report sharp increases in unprepared freshmen during the pasr decade. Institutions were divided into the following categories for research purposes: research universities, doctorial degree granting universities, comprehensive liberal arts colleges and community colleges. Iformation was gathered on institutional context, policies and procedures, organization for the delivery of basic skills, retention information and future directions. Gemeral comments about their findings are included.

Conference Proceedings: Second European Conference of Rehabilitation International: Disability in the Family. (1978). London: Royal Association for Disability and Rehabilitation. (ERIC Document Reproduction Service No. ED 177 756)

This collection of 80 papers was contributed by researchers from many Western European nations, Hong Kong, and India. Topics included information provision, communication, occupational therapy, legislative issues, education and employment issues, etc.

Royer, J. (1979). Theories of the transfer of learning. Educational Psychologist, 14, 53-69.

This article first reviewed theories of transfer defined as the extent to which the learning of an instructional event contributes to or detracts from subsequent problem solving or the learning of subsequent instructional events. A schema theory of transfer was described in which transfer was seen as the activation of previously learned schemata in a new learning situation. Given that the activated schema is appropriate for the task, learning could occur much more rapidly than it would in the case where an appropriate schema was not available.

Rucker, C. N., & Vincenzo, F. M. (1970). Maintaining social acceptance gains made by mentally retarded children. Exceptional Children, 36, 679-680.

Twelve EMR students were paired with 12 high status non-handicapped students for an experimental program to prepare for a carnival with 12 other matched pairs as control. Sociometric advantages were noted for the pair condition but these were not maintained one month later.

Rusch, F. R., Connis, R. T., & Sowers, J. A. (1979). The modification and maintenance of time spent attending using social reinforcement token reinforcement and response cost in an applied restaurant setting. Journal of Special Education Technology, 2, 18-26.

The purpose of this investigation was to evaluate a series of program variables used to modify the time a subject spent attending in an experimental restaurant setting. Selective behaviors of a mildly retarded, female young adult were evaluated, based on combinations of three treatment variables (social reinforcement, token reinforcement, and response cost) in modifying the time spent attending to task. The results showed that the combinations of social reinforcement, tokens and response cost were found less effective in increasing percent of time spent attending to task than were simultaneous application of all treatment variables. Data collected suggested that an intermittent schedule of response cost, weekly token exchanges, minimal feedback on performance earning, and weekly checks, in that order, were

effective in maintaining response gains. Follow-up measures indicated that treatment gains were maintained after all contingencies were removed.

Rusch, F. R., Martin, J., & White, D. (1985). Competitive employment: Teaching mentally retarded employees to maintain their work behavior. Education and Training of the Mentally Retarded, 20, 182-189.

This is a brief but pretty inclusive review of literature on work behavior research on MR employees' maintenance of required work behavior. There have been, the authors noted, two different strategies to incorporate in teaching mentally retarded employees to maintain required work behaviors. One is externally-produced cues which are imposed from the work setting, e.g., co-workers, staff or special educators, etc.; the other is self-control, the major requirement of which is that the individual is free to administer self-reinforcement at any time. Implications of strategies and results were discussed.

Rusch, F. R., & Menchetti, B. (1981). Increasing compliant work behaviors in a non-sheltered work setting. Mental Retardation, 19, 107-111.

The training of one competitively employed person to comply with fellow co-workers in a non-sheltered work setting is attempted. A multiple-baseline design across different groups of co-workers is employed to evaluate the effectiveness of practice plus warnings in producing compliant responses. Results indicate practice and warnings are successful in dramatically increasing positive compliant responding. Sending the person home, once, also results in generalized compliance to a third, untreated group of fellow co-workers.

Rusch, F. R., Schutz, R. P., & Agran, M. (1982). Validating entry-level survival skills for service occupations: Implications for curriculum development. Journal of the Association for the Severely Handicapped, 7(3), 32-41.

This study sought to determine potential employers' expectations for entry into competitive employment by utilizing social validation methodology. Questionnaires were sent to 120 potential employers representing food service and janitorial/maid service occupations. They were asked to answer 47 questions derived for the Mithaug and Hagmeier (1978) study. The respondents suggested 70 survival skills necessary for entry into competitive employment. Five skills were unanimously agreed upon: verbally reciting one's full name upon request; demonstrating basic addition skills; keeping one's hair combed; following one instruction at a time, and completing repetitive tasks previously leaned to proficiency within 0 to 25% of the average rate. Results of this study are discussed, with implications for longitudinal curriculum development.

Rynders, J. E., Johnson, R. T., Johnson, D. W., & Schmidt, B. (1980). Producing positive interaction among Down syndrome and nonhandicapped teenagers through cooperative goal structuring. American Journal of Mental Deficiency, 85, 268-273.

This was a study of 30 junior high school aged bowlers, 12 of whom were Downs syndrome students, who participated under cooperative, competitive, and individualistic conditions. There were significantly more interactions in the cooperative condition. Both the Downs and non-handicapped in the cooperative condition ranked their peers higher than in the others conditions. There was no difference in scores for the three conditions and no differences in self-esteem.

Sabatino, D. A. (Ed.). (1985). Transition from school to the world of work [Special issue]. Techniques: A Journal for Remedial Education and Counseling, 1.

This special issue offers a broad review of the concept of transition and operation. With simplicity and clarity, Sedlak and Johnson tried to answer 11 most frequent questions about transition. D'Alonzo et al. reviewed existing transiton models. Brolin described the Life-Centered Career Education (LCCE) approach. Hitchings and Retish addressed the issue of planned community entry. Alper et al. presented procedures used in follow-up studies of the maintainence of severely handicapped people in competitive employment. Pancsofar and Krause explored the teaching of generalization skills. Hopkins-Best et al. discussed the application and techniques of bibliotherapy for disabled students in transition. Karcz et al. introduced models of interagency cooperation designed to help bridge the abrupt transition from one environment to another that many handicapped youths experience several times each year. It may not be true that all of these studies have broken new ground, but they offer a wide range of approaches, models, and programs focused on transition, and they may help sensitize people to the magnitude and complexity of transition problems.

Sackett, G. P., Ruppenthal, G. C., & Gluck, J. (1978). An overview of methodological and statistical problems in observational research. In G. P. Sackett (Ed.), Observing behavior: Vol. II. Data collection and analysis methods (pp. 1-14). Baltimore: University Park Press.

This is the second of two volumes concerned with research on mental retardation. This volume discusses methodology, measurement, data analysis, and reliability issues related to the conduct of observational research.

Salmon, D., Pear, J., & Kuhn, B. (1986). Generalization of object naming after training with picture cards and with objects. Journal of Applied Behavior Analysis, 19, 53-58.

Generalization of four retarded children's object naming responses to stimuli in the natural environment was assessed after training with either objects or pictures of the objects. In a second experiment half of the stimuli that showed little generalization were retrained by alternating the original training object with an object that belonged to the same stimulus class as the training stimulus. The other half were simply retrained using the object. The alternating procedure resulted in substantial increase in generalization to untrained objects.

Sanderson, H. W., & Crawley, M. (1982). Characteristics of successful family-care parents. American Journal of Mental Deficiency, 86, 519-525.

Characteristics of successful and unsuccessful family-care parents who served mentally retarded/developmentally disabled children and adults residing in a county in upstate New York were examined. Location did not significantly discriminate successful and unsuccessful homes. Successful family caretakers were, however, generally older and more frequently were active in Protestant churches. When examined from the perspective of Holland's vocational orientation, successful woman caretakers most often came from the Conventional category, whereas men most often fit Holland's Realistic classification. Implications of these findings for family-care provider recruitment were discussed.

Sargent, L., Lehman, R., Smith, D., & Hildebrandt, C. (1981). Individualization, simulation, and integration: A model secondary program for the mildly mentally handicapped. Education and Training of the Mentally Retarded, 16, 162-165.

This article reports an effective special education program at Marshalltown High School. The special education teachers blend three programming strategies that are often very difficult to mesh: individualization, simulation, and integration. They sought to emphasize development of self-confidence, functional academic skills, social maturity, independent living skills, and vocational competencies. To accomplish these ends, they chose to individualize instructional procedures, employ simulation as a major part of instruction, and encourage maximum integration into the regular educational program.

Sarkees, M., Batsche, C., McCage, R., & Nicholson, K. (1983). The utilization of V-TECS catalogs with handicapped students: Implementation

manual. Atlanta: Vocational Technical Education Consortium of States. (ERIC Document Reproduction Service No. ED 237 757).

Understanding the importance and necessity of communication and coordination between vocational teachers and special education teachers, the authors provided in this handbook a step-by-step description of the V-TECS catalogs (catalogs from the Vocational Technical Education Consortium of States) which the authors believed to be an effective vehicle. In this handbook, a starting point is suggested, activities are outlined for instructional planning for handicapped students in vocational education programs, and a series of sample document sheets are included.

Scales, W. (1986). Post-secondary education for disabled students--written testimony. AHSSPPE Bulletin, 4(1), 20-32.

This publication reviews the relationship between P.L. 94-142 and Sections 504 and argues the intent is the same, but the methods are very different. P.L. 94-142 calls for identification and diagnosis of children with special needs and provisions of ancillary services as well as the inclusion of parents in the planning. Although 504 promises that programming available to non-disabled students will also be available to disabled students, it does not demand the implementation of new programs or services and does not discuss parent involvement. Therefore, P.L. 94-142 promotes non-discrimination at the post-secondary setting, but at the student's responsibility. In the author's opinion, promoting successful transition with respect to these two policies is necessary.

Scardamalia, M., & Bereiter, C. (1982). Assimilative processes in composition planning. Educational Pychologist, 17, 165-171.

For expert writers, composition is a problem solving process. The similarity of expert and novice composing processes lies in their assimilative character. Novice writers use a knowledge telling strategy. It consists of reducing writing assignments to topics, then telling what one knows about the topic. This has the effect of eliminating much of the problem solving observed in expert composing. It transforms presented tasks to tasks the system is equipped to handle. Experts using reflective planning also transform presented tasks into other tasks, self-generated goals that can be realized within the externally imposed constraints.

Scardamalia, M., & Paris, P. (1985). The function of explicit discourse knowledge in the development of text representations and composing strategies. Cognition and Instruction, 2, 1-39.

Differences in composing strategies among 4th, 6th, and 10th graders was examined. Immature writers focus almost exclusively on structural and language aspects of writing, while adults' use of structural discourse knowledge and language conventions are mediated by representations of gist and intention.

Schalock, R. L., & Harper, R. S. (1978). Placement from community-based mental retardation programs: How well do clients do?. American Journal of Mental Deficiency, 83, 240-247.

This study evaluated a placement program, attempting to determine (1) the relationship between training variables and successful placement and (2) to identify some necessary skills for successful independent living and competitive employment. A sample of 131 persons was chosen on the basis of two years of successful independent living and two years of successful competitive employment. All subjects were followed systematically for 6 months on a weekly basis, and every 3 months thereafter until the study terminated. Results indicate that successful independent living and successful competitive employment require different skills, and thus should be taught separately.

Schalock, R. L., Harper, R. S., & Carver, G. (1981). Independent living placement: Five years later. American Journal of Mental Deficiency, 86, 170-177.

The placement success and quality of life of 69 mentally retarded persons placed into independent housing 5 years previously was evaluated. Eighty percent (n=55) were still in their original independent housing placement. On the basis of multiple regression analysis, the most significant predictor variables were the behavioral skill areas of personal maintenance, communication, community integration, clothing care and use, and food preparation. Unsuccessful placements were related to bizarre behavior, nutritional problems, and inadequate home maintenance. Quality life variables analyzed included employment, finances, community utilization, leisure-time usage, and friendship patterns. Analysis of the quality of life variables presented a mixed picture: part of the data reflected low income and possible loneliness; on the other hand, community utilization occurred frequently and involved normal activities. Clients reported that they were proud of their apartments and felt good about doing their own thing. An extended assistance-training model was present.

Schalock, R. L., Harper, R. S., & Genung, T. (1981). Community integration of mentally retarded adults: Community placement and program success. American Journal of Mental Deficiency, 80, 478-488.

The extent of community and program success of 166 mentally retarded clients placed into a community-based program was evaluated over a nine year period. Twenty predictor variables measuring institutional factors, client characteristics, training variables, and community characteristics were related to community or program success. Successful community placement was associated with sensorimotor and work skills, appropriate social-emotional behavior, gender, and family acceptance of community placement, and involvement with the interdisciplinary team process. Program success was associated with language and psychomotor skills, education received prior to community placement, community and institution size, and family involvement. Sixteen percent of the clients were reinstitutionalized into either the state mental retardation facility or a mental health facility. Factors associated with successful placement and program progression were discussed, as was a model for future deinstitutionalization research.

Schalock, R. L., & Lilley, M. A. (1986). Placement from community-based mental retardation programs: How well do clients do after 8 to 10 years? American Journal of Mental Deficiency, 90, 669-676.

The placement of success and quality of life of 85 mentally retarded persons placed into independent housing and competitive employment 8 to 10 years ago was evaluated. Three groups emerged on the basis of clients' current programmatic status, living-work placement, and financial status. A number of variables were found to discriminate between successful and unsuccessful living and work outcomes, including family involvement, social-emotional behavior,umber of disabilities, sensorimotor functioning, symbolic operations, and auditory-visual processing. For assessed quality of life, significant correlations included family involvement, income, number of disabilities, and age. Those who were successful had a high assessed quality of life index than those who were unsuccessful.

Schieser, H. A. (1979, April). Challenges of educating today's youth: Entry--retention--graduation. Paper presented at the Midwest Regional Annual Meeting of the Society for Ethnic and Special Studies, St. Louis. (ERIC Document Reproduction Service No. ED 198 269)

The author argued that, compared to European education, the U.S. school system has done a poor job of preparing American youth for the job market, i.e., to develop a successful career. The U.S. School system should, starting at the preschool level, aim at providing skills, attitudes, and experiences for children throughout their school years, and that school curricula should emphasize practical skills, e.g., tool use, arts, crafts, and shop activities.

Schill, W. J., McCartin, R. M., & Meyer, K. (1985). Youth employment: Its relationship to academic and family variables. Journal of Vocational Behavior, 26, 155-163.

Survey data from 4587 Washington State high school students were used to investigate relationships among students' employment status and family structure, socioeconomic position, and adolescent academic status. Employed students were more likely to have higher GPAs, be from higher socioeconomic families, or have a mother or father employed in a higher-status occupation; no relationship was found between mother's or father's education and employment of the student. The unemployed student was more likely to be from a lower socioeconomic family than was the employed student, to have a lower GPA, and to have a father and mother working in a lower status occupation. When hours of employment for the student were categorized into those unemployed, those employed 20 hours a week or less, and those employed over 20 hours a week, hours of employment were found to have a statistically significant curvilinear relationsihp to adolescents' GPA.

Schloss, C., & Schloss, P. (1982). The influence of exceptional labels on employer expectations for the training and success of special needs adolescents. Journal for Vocational Special Needs Education, 4, 5-7.

The purpose of this study was to investigate the influence that a job applicant's exceptional label has on the potential employer's plans for work skill development and expectations for potential employee success. The subjects were sixty managers of small businesses in southern Illinois. Three separate forms of the resume were constructed, each identical with the exception of one sentence in the educational history section which stated that athe adolescent was enrolled either in: 1) a regular high school program, 2) a program for the behavior disordered adolescents, or 3) a program for hte mentally retarded. The sixty business managers were randomly assigned to each of the groups. The results indicate that there is a difference in employers' training plans and expectations of job success for applicants labeled mentally retarded. Differences were also obtained in managers' plans for work skill development when comparing job applicants labeled normal and behavior disordered. Additional research may validate approaches to altering employer attitudes and practices so as to maximize the probability of work adjustment for hte handicapped adolescent.

Schmidt, F. L., Greenthal, A. L., Hunter, J. E., Berner, J. G., & Seaton, F. W. (1977). Job sample vs. paper-and-pencil trades and technical tests: Adverse impact and examinee attitudes. Personnel Psychology, 30, 187-197.

This study was part of a larger project aimed primarily at the devleopment and evaluation of a number of techniques designed to increase the economic and practical feasibility of performance testing. Other objectives were to

determine 1) whether performance tests might be expected to show smaller majority-minority score differences than paper-and-pencil tests and 2) whether examinee attitudes toward, and evaluations of the two kinds of tests differed. Nothing in the findings implies that the paper-and-pencil test given is invalid or fails to meet legal requirements. However the performance test was determined to have the less adverse impact and both the majority and minority groups perceived the test as fairer, clearer, and of more appropriate difficulty level.

Schreiner, J. (1978). Prediction of retarded adults' work performance through components of general ability. American Journal of Mental Deficiency, 83, 77-79.

A factor analysis was performed on a set of variables used to predict work performance, or industrial rate, for 127 mentally retarded adults. The results indicated that there is a general ability factor that can be partitioned into three components; cognitive, visual-motor, and work sample/sorting abilities. The latter two components were more closely related to industrial rate than was the former. Variables included subject characteristics, standardized tests, ratings, and work samples. As a group, the work samples were the best predictors of industrial rate; the subject characteristics were the poorest.

Schumacher, F. A., & Townsend, J. C. (1960). Training mentally retarded for employment. Rehabilitation Record, 1(1), 24-29.

The discussion centers on the effect of the 1954 P.L. 565, which provided a base for research and demonstration activities in vocational rehabilitation and reinforced recognition of the workshop as an effective rehabilitation instrument. A description of the projects of the Office of Vocational Rehabilitation (OVR) is the bulk of the article. Success was determined by the rising number of mentally retarded who were rehabilitated into employment.

Schumaker, J., Bragg, L., Hazel, S. J., Sherman, J. A., & Sheldon, J. (1982). Social skill performances of learning disabled, non-learning disabled and delinquent adolescents. Learning Disabilities Quarterly, 5, 388-397.

This study examined whether LD adolescents exhibit social skill deficits when compared to their non-handicapped peers. The study compared the performance of LD adolescents on eight general social skills to the performance of two other groups of youths; a group of nonhandicapped adolescents who were members of a high-school band and a group of court-adjudicated juvenile delinquent adolescents who had been referred for social skills training by their probation officers. Social skills were tested individually by role playing situations. The results showed that the non-LD youths performed significantly better than the other two groups of youths on seven of the eight skills. The LD youths were found to perform significantly better than the non-LD youths on

only one skill, resisting peer pressure. The results point to a cause for concern on behalf of those LD youths who perform significantly lower that the non-LD youths, as well as those LD youths who exhibit deficits similar to those of youths who have been referred by society for social adjustment problems. One implication of this result is the urgent need for curricula and procedures for social skills training at the secondary level.

Schutz, R., Jostes, K., Rusch, F., & Lamson, D. (1980). Acquisition transfer and social validation of two vocational skills in a competitive employment setting. Education and Training of the Mentally Retarded, 15, 306-311.

This paper describes the use of contingent pre-instruction in the acquisition training of two vocational tasks with two mentally retarded individuals. The study included maintenance and generalization probes and incorporated social validation of training results by potential consumers. The results of this study were evaluated in a multiple baseline design. Results were discussed in terms of the efficacy of contingent pre-instruction, the importance of addressing maintenance and results obtained during the training effort.

Schwartz, D. J. (1977). A job sampling approach to merit system examining. Personnel Psychology, 30, 175-185.

An introduction to the job sampling approach. The approach is defined as: a task-based, structureed system of eliciting the information necessary to construct the rating schedule from source most able to provide that information and for using the information to construct the rating schedule and linking it to job performace. The steps include: definition of the performance domain of the job in terms process statements; identification of the selection and measurement objectives of the organization; development of the measurement domain in relation to the performance domain and to the selection and measurement objectives; and demonstration that a close match between the performance domain and the measurement domain was in fact achieved.

Schworm, R. W., & Abelseth, J. L. (1978). Teaching the individual with severe learning problems: Strategies which point to success. Education and Training of the Mentally Retarded, 13, 146-153.

Before teaching tasks to individuals with severe learning problems, it may be necessary to deliberately plan for and systematically evaluate the factors of selective attention, information feedback, retention, and generalization for each lesson. Each of the factors is defined and described in this article: a) Selective Attention - the criteria for determining when an individual has adequately attended to the relevant properties of a task is when the properties of one task are selected and adapted to perform initially a similar or related task, b) Information Feedback - as a cue or prompt presented by the teacher to the student during or after performance. Strategies and procedures

for providing feedback are discussed, c) Retention - a brief or durable period when task properties persist in memory. Retention of a task must occur across time, across trials and across the presentation & performance of other tasks. Factors for retention are provided, d) Evaluation - direct and continuous evaluation of individual performance is an important component of an instructional program. Factors for evaluation are discussed, d) Generalization - it is of ultimate importance that some individuals are taught to recognize task properties, across situations, language patterns, people, & dimensions. Factors for ensuring generalization are discussed, e) Motivation - additional incentive must be provided to students for motivating their performance on a task. Factors for motivation are rated.

Scruggs, T., & Mastropieni, M. (1984). Issues in generalization: Implications for special education. Psychology in the Schools, 21, 397-403.

Cognitive and behavioral theories in psychology have failed to explain adequately the commonly reported failures in generalization exhibited by mentally retarded populations. This article provides background on generalization as viewed by behavior and cognitive psychologists, describes the failures to facilitate generalization, and offers an alternative explanation of such failures. This explanation describes the generalization process in terms of individual capacity for analogical reasoning.

Sedita, J. (1980). Section 504: Help for the learning disabled college student. (ERIC Document Reproduction No. ED 207 412)

Section 504 of the Rehabilitation Act of 1973 and its implications for learning disabled adults desiring post-secondary education are examined, and suggestions for services that might best meet the needs of this group are offered. Section 504 is a basic civil rights provision aimed at ending discrimination against handicapped citizens. According to the regulation, schools were given one year to perform a self-evaluation of their services relative to the handicapped (by 1978) and three years to fully implement the law (1980). The regulation is applicable to all post-secondary educational programs and activities that receive federal financial assistance. In colleges and universities, recruitment, admissions, and treatment of students must be free of discrimination. Reasonable modification of academic requirements must be made, which might include extension of time for completing programs or adaptation of the way certain courses are conducted. Students with impaired sensory or manual skills must be informed about auxiliary aids provided through charitable or governmental organization. Among the services needed most often by learning-disabled students are diagnostics, program guidance, individual or group tutoring, and instructor intervention. It is suggested that the current controversy over what constitutes a learning disability and which testing instruments can accurately diagnose this handicap, as well as the variation from student to student in type of deficit and degree of disability, may make it difficult for learning

disabled students to receive needed services. Additional considerations pertaining to admissions, academic adjustments, auxiliary aids, administration and enforcement, cost, and attitudes are addressed.

Sedlak, R., Doyle, M., & Schloss, P. (1982). Video games: A training and generalization demonstration with severely retarded adolescents. Education and Training of the Mentally Retarded, 17, 322-336.

The present study examined the extent to which three severely retarded adolescents could learn to play a popular video game in a simulated setting and then demonstrate generalization of that skill in a community setting with a commercial video game. Multiple baseline design across subjects was used. Following the baseline and instructional training step was selected for each subject. The step was the first in the sequence in which the subject was unable to complete independently during baseline. After demonstrating mastery on the simulated version of the game each subject was taken to a discount store where the community version of the video game was available. The major difference between the simulation and community version of the game was the control unit used for the movement of the cannon. The results showed that all three subjects learned the steps needed to operate the video game in a relatively short period of time. During the community generalization phase, each of the three subjects demonstrated the necessary skills to perform well on the community version of the game. This study further demonstrated that with proper generalization procedures built into the training sequence, skills learned in the training setting can generalize to a community setting with a minimal amount of retaining.

Seekins, T., & Fawcett, S. B. (1986). Public policy making and research information. The Behavior Analyst, 1, 35-45.

This paper provides an overview of how public policy is determined, problems in implementing the policy, consideration factors and how behavioral science can impact the process. The author identifies four stages to policy development; agenda formation, policy adoption, implementation and policy review. Ways in which the behavioral scientist can impact each stage is discussed. Insights into the motivational factors that affect the process are also discussed.

Seidenberg, P. L. (1986). Getting the gist: Relating text processing research to reading and writing instruction for learning disabled students. A High School/College Linkage Model To Expand Higher Education Opportunities for Learning Disabled Students. Long Island, NY: University of Long Island, Transition Project Learning How to Learn.

This working paper provides a review of the literature of theories and research in text processing and procedures for providing direct instruction. The author contends that success for students with learning disabilities in

secondary and post-secondary education is contingent on the students ability to comprehend and formulate expository writing. Current lines of research that are reviewed include: 1) macrostructure of test comprehension, or determinatiof the microsturcture of the sentence to provide the surface structure information of the passage. Rules are used to condense the text to textual and contextual relevant information. 2) Identification of main ideas, or readers identify the main idea of the passage and rate sentences on supporting detail of the main idea. 3) Summarization skills, or the ability to a) delete unnessary inforamtion, b) delete redundant information, c) substitute superordinate terms for lists, d) substitute superordinate action for list, e) select a topic sentence, f) if no topic sentence invent one. Differences are noted in stage of student development and novice writers on these abilities.

Seidenberg, P. L. (1986). A framework for curriculum development for secondary learning disabled students. A High School/College Linkage Model To Expand Higher Education Opportunities for Learning Disabled Students. Long Island, NY: University of Long Island, Transition Project Learning How to Learn.

This article provides a design of a foundation of a secondary curriculum program to prepare college bound students with learning disabilities. The program is based on findings of research on adolesences and young adults with learning disabilities, and metacognitive development and its impact on acedemic learning. Reviews of research on LD students in secondary and post-secondary education have identified areas of problems and the interventions that have proven most successful. This information is combined with findings in metacognitive on the critical content variables for designing curriculum to develop the model.

Sewell, W., Hauser, R., & Wolf, W. (1980). Sex, schooling and occupational status. American Journal of Sociology, 86, 551-583.

The Wisconsin longitudinal data come from several sources: (1)fa survey, conducted in 1957, of background, school experiences, and aspirations among all high school seniors in Wisconsin public, private, and parochial schools (from this survey, a random sample of 4,994 men and 5,323 women was drawn); (2) information from school and public records; (3) a follow-up in 1964 of the sample drawn from the 1957 survey (questionnaires were directed to parents); (4) a second follow-up of the 1957 survey (approximately 90% of the original sample was located and interviewed). In an attempt to describe the process of occupational achievement among men and women from the point of entry into the labor market to mid-life, this 18-year follow-up study of Wisconsin high school seniors ran a correlation test on the data. Data is summarized in tables, and significance of findings is discussed.

Shapira, Z., Cnaan, R., & Cnaan, A. (1985). Mentally retarded workers' reactions to their jobs. American Journal of Mental Deficiency, 89, 146-155.

This study investigated the issue of retarded people's motivation and performance by examining the relevance of supervision and job characteristics to the retarded subjects' work behavior. Three experienced social workers observed a group of retarded employees whose job was assembling toys. The workers were then interviewed on their perceptions of and reactions to their job characteristics and supervision, and these were related to performance data that included performance time, productivity, and effort ratings. Results showed that performance measures were related to perceived job characteristics and that growth-need strength (people's needs for personal development and achievement) affected these relationships. The high growth-need strength group put more effort into the quality of their work than low growth-need strength group. On the basis of these results, the feasibility of using motivation models for retarded workers that were designed for non-retarded workers was discussed.

Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes, and ethnic relations. Review of Educational Research, 50, 241-271.

This essay compares and evaluates five methods of cooperative learning in the classroom. Peer Tutoring methods include: Jigsaw by Aronson, Teams-Games-Tournament (TGT) by DeVries, and the Student Teams and Academic Divisions (STAD) by Slavin. The Johnsons' cooperative learning approach and Sharan's Small-Group Teaching method are classed as Group-Investigation approaches. Comparisons of academic achievement, social affective variables, and race relations showed peer tutoring methods superior for lower cognitive functions while the group-investigation methods were more effective for multi-lateral discussion, problem solving, synthesis, application, and goal planning.

Sharan, S., Ackerman, Z., & Hertz-Lazarowitz, R. (1980). Academic achievement of elementary school children in small-group versus whole-class instruction. Journal of Experimental Education, 48, 125-129.

A study comparing academic achievement of 108 Israeli children in grades two through six taught in cooperative learning groups with 109 children taught in the traditional whole-classroom approach. Achievement tests designed to indicate low and high levels of academic functioning indicated that three out of the five grade levels of children in the cooperative groups received significantly higher scores on high level questions. Second grade children taught in the cooperative condition received significantly higher scores on both high and low level questions. There were no significant differences in the remaining comparisons.

Sherman, S. W., & Robinson, N. M. (Eds.). (1982). Ability testing of handicapped people: Dilemma for government, science, and the public. Washington, DC: National Academy Press.

The Panel on Testing of Handicapped People studied the psychometric, social, legal, economic, and ethical issues surrounding the use of standardized tests in making decisions about the education and employment of people with handicapped conditions. The report examines current testing and selection practices in schools and the workplace in order to describe the experiences of handicapped people and to determine, insofar as possible, the extent to which testing is a barrier to the full participation of handicapped people in American society. The report deals in depth with the legal and psychometric issues relating to the testing of people with handicapping conditions and to the testing requirements of the regulations implementing Section 504 of the Rehabilitation Act of 1973.

Shevin, M., & Klein, N. (1984). The importance of choice-making skills for students with severe disabilities. Journal of the Association for the Severely Handicapped, 9, 159-166.

This paper presents a rationale for the inclusion of choice-making as an important skill area for persons with severe disabilities. Successful fostering of choice-making will require both systematic teaching of new skills and provision of opportunities to practice those skills in the classroom and in natural settings at home and in the community. There are three essential components to a choice-fostering curriculum: a) cognitive/discrimination skill clusters - those skills which enable the learner to understand and discriminate from among alternatives as a prerequisite to acting, b) effective skill clusters - includes concepts such as I like/don't like c) generalization of skills in real-life experiences - both inside and outside of the classroom. Three contexts for fostering choice-making skills in severely retarded students will be include: 1) classroom activities designed to teach specific choice-making skills, 2) integration of choice-making opportunities throughout the student's day, across curricula domains, 3) provision of opportunities, both inside and outside of school, for students to experience the benefits and consequences of choices they have made.

Shurtleff, H. (1986). Normalization. Unpublished manuscript.

This paper reviews the concept of normalization and its impact on the development of the theory of mainstreaming. The article concludes that mainstreaming has been advantageous, but address Hoffmaster concern that mainstreaming eliminates the freedom of choice for individuals with mental retardation.

Siegler, R. S., & Taraban, R. (1986). Conditions of applicability of a strategy choice model. Cognitive Development, 1, 31-51.

Siegler and Schrager's (1984) strategy choice model was applied to the balance scale problem. The results were consistent with the view that the model could be used to characterize children's strategy choices whenever they possess both problem-specific associations and back-up strategies. Solution times suggested that qualitative or quantitative back-up strategies (rules, and muddle through or guess) were used on the most difficult items (conflict items) and retrieval was used on the less difficult items (non-conflict problems or items where there was an associative strength).

Sitlington, P. (1981). Vocational and special education in career programming for the mildly handicapped adolescent. Exceptional Children, 47, 592-598.

This article discussed the work experience programs, the concept of these programs is to coordinate the activities of the classroom with actual on-the-job experiences. Five primary components of the work experience sequence have been identified: a) prevocational experiences, b) job analysis, c) in-school work experience, d) community placement, and e) after graduation placement and follow-up. The field of vocational education has much to offer the handicapped student in the way of specific skill training for semi-skilled and skilled occupations. Areas that are usually considered in vocational education are listed. Instruction in these areas can be provided through a variety of organizational systems. Cooperative and laboratory techniques provide students with hands-on experience. Programming options - both special education and vocational have much to offer in the area of career preparation for handicapped students. Each of these disciplines has disadvantages. Several options that have been identified for meeting the career programming needs of handicapped students are discussed. This paper also provided a school-based career education model for handicapped students. This model includes career awareness activities to begin at the elementary level, career exploration activities to begin at the junior high level, and career preparation activities conducted in senior high school and beyond. This model also allows for inclusion of specific skill training as well as preparation of the handicapped student in the equally important areas of values, attitudes, and habits, human relationships and daily living skills.

Skon, L., Johnson, D. W., & Johnson, R. T. (1981). Cooperative peer interaction and individualistic efforts: Effects on the acquisition of cognitive reasoning strategies. Journal of Educational Psychology, 73, 83-92.

This study of 86 first-grade children compared effects of cooperative, competitive, and individualistic goal structures on student achievement and the acquisition of high-level cognitive reasoning strategies. Results

indicated that cooperative interaction promoted higher achievement on six out of eight learning tasks. Higher cognitive reasoning was promoted while solving conservation, concept-attainment, categorization, retrieval, language acquisition, and mathematical reasoning tasks. No differences were found between homogeneity, students cooperation or competing with students of equal ability, or heterogeneity, cooperation or competition with those of different ability levels.

Slavin, R. (1980). Cooperative learning. Review of Educational Research, 50, 315-342.

This review summarized the results of 28 primary field projects using cooperative learning methos in elementary or secondary classrooms. The characteristics of various cooperative learning techniques are evaluated. In most cases, results indicated that cooperative learning techniques showed significantly higher academic achievement than traditional techniques. The effectiveness of the cooperative learning methods was increased by a structured schedule of instruction, individual accountability, and a defined reward system. Higher level cognitive functions appear to be more effective with less structured techniques. Affective goals such as relationships between ethnic groups, mutual concern, and improved self-esteem are also enhanced by cooperative learning techniques.

Slavin, R. E. (1980). Cooperative learning in teams: State of the art. Educational Psychologist, 15, 93-111.

This review article focuses on four major cooperative-learning techniques. The four models include: Team-Games-Tournament (TGT), Student Teams-Achievement Divisions (STAD), Jigsaw I and II, and Group-Investigation. Results from 27 studies indicate that in most cases the four methods showed significantly positive effects on academic achievement, with TGT showing the most consistent effects. Generally positive effects are found on student inter-ethnic relations, mutual concern, self-esteem, liking of school, and other variables.

Slavin, R. E. (1981). Synthesis of research on cooperative learning. Education Leadership, 38, 655-659.

In this synthesis the most widely used cooperative learning methods are reviewed. Included are Student Teams-Achievement Division (STAD), Teams-Games-Tournament (TGT), Jigsaw I and II, Learning Together, and Group Investigation. Positive evidence is found for cooperative methods in academic achievement, intergroup relations, mainstreaming, self-esteem, and attitude toward school. A warning is issued that the effectiveness of cooperative learning methods depends upon the incentives given to students. Group members must have a desire to help one another and be given a reason to contribute to the group effort.

Slavin, R. E. (1984a). A rejoinder to Carlberg et al. Educational Researcher, 13(8), 24-27.

In this article, Slavin replies to the authors who replied to his criticism. He rejects the arguments by the Johnsons on the basis that they have indeed misrepresented the evidence by their inclusion techniques.

Slavin, R. E. (1984b). Meta-analysis in education: How has it been used? Educational Researcher, 13(8), 6-15.

This is a critical review of the use of meta-analysis with attention to two articles relevant to special education. Of concern to this series of articles is the critique of two meta-analyses of cooperative learning by the Johnsons. Specifically, the meta-analyses are shown to be flawed. One is flawed because of the inclusion of implementation studies and the other because of the inclusion of achievement results from studies which are not assessing school achievement.

Slavin, R. E. (1984c). Students motivating students to excel: Cooperative incentives, cooperative tasks, and student achievement. The Elementary School Journal, 85, 53-63.

This review of field research evidence attempts to discover the separate effects of cooperative incentive structures and cooperative task structures on student achievement. Task structures were divided into two categories: task specialization and group study. Incentive structures include those who give group rewards on the basis of individual learning or single group product and on those who give individual rewards but no group rewards. A review was conducted of 46 field experiments. Results showed 89% positive student achievement in the studies with a group reward for individual learning. No positive effects were found for methods that did not use a group reward. Results indicated also that positive effects on student achievement resulted from the use of cooperative incentives, but not from coopeative tasks.

Slavin, R. E., Madden, N. A., & Leavey, M. (1984). Effects of cooperative learning and individualized instruction on mainstreamed students. Exceptional Children, 50, 434-443.

A comparison of cooperative, individualistic, and control conditions for 117 academically handicapped 3rd, 4th, and 5th grade students. Both methods showed significant advantages over the control condition. There were no significant achievement differences. The study was well presented.

Smith, I. D. (Ed.). (1980). Australian Association for Research in Education Annual Conference: Youth schooling and employment. Part A. Melbourne:

Australian Association for Research in Education. (ERIC Document Reproduction Service No. ED 203 146)

This volume, Part A, is a collection of 26 research papers reporting proceedings of an Australian conference on youth schooling and employment. Areas covered in these papers include: research design and analysis of students' perceptions of school and work; unemployment among dropouts; relationship of social background, educational achievement, and occupational aspirations; predictive validity of a class inventory; relationships of student characteristics, motivational and process factors, and career development, etc.

Smith, I. D. (Ed.). (1980). Australian Association for Research in Education Annual Conference: Youth schooling and employment. Part B. Melbourne: Australian Association for Research in Education. (ERIC Document Reproduction Service No. ED 203 147)

This volume of 25 research reports is Part B of the proceedings of an Australian conference on youth schooling and employment. The focus of these papers is on research of alienation from school and work, and on youth in transition. Issues covered are teacher perception of Australian school cultures, selection procedures, motivation of entering teaching, classroom learning processes and atmosphere, factors affecting occupational choice, post-school education and employment, and transition for migrant children.

Smith, J. D., & Dexter, B. L. (1980). The basics movement: What does it mean for the education of mentally retarded students? Education and Training of the Mentally Retarded, 15(1), 72-74.

In this article, the authors argued against the "Back to the Basics" slogan. The fundamental question asked was what "Basics" means to the education of mentally retarded students. The authors protested that the "Basics" advocates have not addressed the fact that a significant percentage of children attending public schools today require special education programs. A return to sink-or-swim techniques of instruction, these authors predicted, would be disastrous for these children. From this perspective, they suggested that special education is by itself a basics movement, for it teaches exceptional children the basics to live a fulfilled, independent adult life.

Smith, K., Johnson, D. W., & Johnson, R. (1982). Effects of cooperative and individualistic instruction on the achievement of handicapped, regular, and gifted students. Journal of Social Psychology, 116, 277-283.

This study of 55 sixth grade students in a science class compared the two methods for the three types of students. Unfortunately, handicapped was not defined nor was gifted. Results of an achievement test favored the cooperative condition.

Smith, P. C., et al. (1974). Factor structure for blacks and whites of the Job Descriptive Index and its discrimination of job satisfaction. Journal of Applied Psychology, 59(1), 99-100.

A brief report of a study to determine: 1) whether the convergent and discriminant validity that was reported by Smith, Kendall, and Hulin (1969) for industrial workers would hold for civil service workers, 2) to compare the factor structure for black and whites, 3) to test for a general factor as predicted by Herzberg et al. (1957), and 4) to determine item discriminability of the 5 scales for three different white-collar samples of workers. The findings of the study showed that identities of factors for blacks were the same as for one or more groups of whites, and the generality of applicability of the Job Descriptive Index to both white and black clerical subjects seems to be established.

Solmick, J. V., & Baer, D. M. (1984). Using multiple exemplars for teaching number-numeral correspondence: Some structural aspects. Analysis and Intervention in Developmental Disabilities, 4, 47-63.

The study examined the ability of preschool-age children to solve five format exemplars of number-numeral correspondence. The children were given an initial series of probes in all five formats using a set of three numbers. One of the formats in which the child performed poorly was trained, and generalization to other formats was then examined by a second series of probes. The results indicated that some children were able to solve number-numeral correspondence problems in some formats and not in others, this deficiency was remediated by training in one, two, or three format exemplars. Performance in two of the formats was highly correlated in 3 of 4 children, suggesting that there exists a response class structure of number-numeral correspondence. The theoretical and treatment implications of analyzing response structure are discussed.

Solomon, G. S., Wilson, D. O., & Galey, G. S. (1982). Project DEBT: Attempting to improve the quality of interaction among handicapped children and their parents. Journal of the Association for the Severely Handicapped, 7(2), 28-35.

Project DEBT (Developmental Education Birth through Two), an early identification and intervention program, attempted to improve the quality of interaction among handicapped children and their parents. Pre- and post-treatment measures of the quality of family interaction revealed statistically significant improvements in the mild at risk and moderately handicapped groups of children but not among the severely handicapped group. Various explanations are offered for the lack of a treatment effect among the severely handicapped group. Implications for these findings and directions for future research on selected issues are also presented.

Sowers, J. A., Verdi, M., Bourbeau, P., & Sheehan, M. (1985). Teaching job independence and flexibility to mentally retarded students through the use of a self-control package. Journal of Applied Behavior Analysis, 18, 81-85.

Four severely to moderately retarded high school students participating in a vocational training program were trained to use a picture-cue system. The system consisted of photographs of vocational tasks that were inserted in the assigned order in a photo album sheet, self-management was accomplished by marking off each photo after its corresponding task was completed. Students were assigned seven tasks from a pool of 13 each day. Results indicated that the students quickly learned to use the picture-cue system to change tasks throughout their workday without trainer prompts and that performance was maintained as trainer feedback and presence were decreased. At the end of the study, two students who were exposed to novel photographs were able to initiate independently after only minimal training, suggesting that the use of the picture-cue system had become a generalized skill.

Sowers, J. A., Rusch, F. R., Connis, R. T., & Cummings, L. E. (1980). Teaching mentally retarded adults to time-manage in a vocational setting. Journal of Applied Behavior Analysis, 13, 119-128.

Three retarded adults who had minimal ability to tell time were trained to time-manage. Each was given a card with clock face representations on which the hands of the clock were drawn, representing each trainee's assigned lunch and break times. Instruction was given before work to perform each of the required behaviors when the real clock matched the clock faces. Results indicated that the package consisting of pre-instruction, instructional feedback, and picture cues was effective in producing independent time management responding. When the first two components were withdrawn, two trainees maintained high levels of correct responding. Correct responding decreased for one trainee when pre-instruction was withdrawn. Re-introduction and subsequent withdrawal of the components resulted in maintenance by this trainee. Little improvement in time-telling ability resulted.

Speece, D. L., McKinney, J. D., & Applebaum, M. I. (1986). Longitudinal development of conservation skills in learning disabled children. Journal of Learning Disabilities, 5, 302-307.

Three-year longitudinal investigation on the development of conservation skill in learning disabled children. LD group demonstrated a developmental delay in attaining the stage of concrete operational. However, when this stage was achieved, the LD group appeared to acquire specific concepts at the same rate as normally achieving children.

Spencer, R. M., & Weisbert, R. W. (1986). Context-dependent effects on analogical transfer. Memory & Cognition, 4, 442-449.

This study first replicated Gick and Holyoak's (1983) experiment in which stories that were analogous to the radiation problem were presented and then subjects asked to solve the radiation problem. The experiment differed in that the stories were presented in a different context (experiment) than the radiation problem (classroom demonstration). Transfer occurred only among those prompted to use the stories to help solve the problem. In their second experiment, they varied the context and added a second variable of interval between stories and problem (6-minute or 45-second delay). Transfer occurre4d for those in both of the same context conditions. Context and timing were found to have an interactional effect on transfer with more subjects transferring when the problem-solving was immediate.

Sprague, J. R., & Horner, R. H. (1984). The effects of single instances, and general case training on generalized vending machine use by moderately and severely handicapped students. Journal of Applied Behavior Analysis, 17, 273-278.

This report provides an experimental analysis of generalized vending machine use by six moderately and severely retarded high school students. Dependent variables were training trials to criterion and performance on 10 non-trained generalization vending machines. Three strategies for teaching generalized vending machine were used. Training occurred with a) a single vending machine, b) three similar machines, or 3) three machines that sampled the range of stimulus and response variation in a defined class of vending machines. Results indicated that the third approach was the most effective method of obtaining generalized responding. Methodological implications for the experimental analysis of generalization and programmatic implications for teaching generalized behaviors are discussed.

Stainback, W., & Stainback, S. (1982). Nonhandicapped students' perceptions of severely handicapped students. Education and Training of the Mentally Retarded, 17(3), 177-183.

This paper is based on a study which sought to compare non-handicapped students' perceptions of severely handicapped students to their perceptions of non-handicapped students. Students perceived the characteristics of severely handicapped students as being significantly different than the characteristics of non-handicapped students, with the severely handicapped being perceived as having fewer positive characteristics. The students also expressed significantly different feelings toward severely handicapped students as compared to their feelings toward non-handicapped students. Their feelings toward the severely handicapped were less positive and more negative. The results are discussed in light of past research findings related to the attitudes of non-handicapped toward severely handicapped students.

Stainback, W., Stainback, S., & Strathe, M. (1983). Generalization of positive social behavior by severely handicapped students: A review and analysis of research. Education and Training of the Mentally Retarded, 18, 293-299.

In this article, the authors review the research on promoting positive social behavior of severely handicapped students and analyze the research in terms of those facts that have been found to influence generalization. Based on the available research, training the social skills of severely handicapped students can result in generalization across settings, people, and responses. However, generalization apparently does not occur spontaneously. Programming procedures employed to foster generalization appear to influence the degree of generalization success achieved. Factors that appear to influence the generalization of social behavior are discussed. Those factors are selection of target behaviors, consequences of behavior, characteristics of training conditions, etc.

Stallard, C. K. (1982). Computers and education for exceptional children: Emerging applications. Exceptional Children, 49(2), 102-104.

This article reviews advances in the ways that microcomputers are being introduced into schools. The author explores some of the ways that this technology can and is being used in programs for exceptional children.

Stein, B. S., Way, K. R., Ranningfield, S. E., & Hedgecough, C. A. (1986). Constraints on spontaneous transfer in problem-solving tasks. Memory and Cognition, 14, 432-441.

The effect of contextual relevance and surface-structure similarity on spontaneous transfer were examined. Contextual relevance referred to the clue statement's emphasis on relevant or irrelevant properties of the key concepts needed to solve the problems. Surface-structure similarity referred to the similarity of words used in the clue and problem statements. Problem statements involved seemingly implausible events for which the subject was asked to provide a plausible explanation. Contextual relevance showed consistent positive effects on spontaneous transfer whilesurface-structure similarity had positive effects when combined with contextual relevance. Results suggested that accessibility of relevant clue information was influenced by similarity in surface structure.

Stein, J. (1984). Part I: Microcomputer uses to promote physical proficiency and motor development of students with handicapped conditions. Physical Educator, 41(1), 40-42.

This is the first of two articles that promote the use of computers in educational programs for students with physical handicapping conditions.

Myths that prevent individuals from realizing the advantages to be derived from computer technology are discussed. The article discusses the following ways in which computers can be used. Physical therapy programs that improve motor skill can be developed. Teachers can utilize data base managers to assist them in the generation on individual education plans. While the teachers are still required to determine appropriate educational plans, computers can reduce the time and tedium associated with the process.

Stern, P. H., & Ollayos, C. W. (1984). Personal computer based programs for the handicapped. Prosthetics and Orthotics International, 8, 82-86.

This paper discusses the Burke Rehabilitation Center use of microcomputers in rehabilitation programs. Computers are currently used to: 1) Provide access to a variety of interface switches; 2) motivate and train; 3) provide alternative approach to neuropsychological testing and behavioral assessment; 4) provide cognitive rehabilitation to patients with head injuries; and 5) provide another option for pre-vocational evaluation.

Stodden, R., & Ianacone, R. (1981). Career/vocational assessment of the special needs individual: A conceptual model. Exceptional Children, 47, 600-608.

The proposed career/vocational assessment model outlines a developmental process for increasing an individual's awareness and understanding of self in relation to the world of work. A prone function of the model is the collection of developmental information contribution to career growth decisions during the formative years. Rather than produce isolated assessment data regarding work trait factor performance, the developmental information takes on an integrative, demonstratively useful role in facilitating the total development of the special needs individual. Operational implications for the model concept are numerous for many programmatic situations and data collection arrangements within the normal delivery of educational services. Vocational assessment model components: Component I - awareness, exploration and understanding and assessment of the self and general occupational cluster areas, Component II - in-depth work role assessment of specific work related and work skills, Component III - interpretation, evaluation, and preparation of data for application.

Stodden, R. A., & Browder, P. M. (1986). Community based competitive employment preparation of developmentally disabled persons: A program description and evaluation. Community Based Competitive Employment, 43-53.

Vocational competence is recognized as a critical variable assisting the participation of developmentally disabled persons within valued roles of society. Employment success factors have been generated within the areas of: a) training approach and methodology. The individual service plan was based upon the individual's particular needs, the service plan included provisions

for medical support, counseling, leisure/recreation activities, residential planning, consumer education, and civic involvement. With regard to training methodology, instruction was individualized to meet the particular needs of trainees. Skills and behaviors were taught in the natural environments in which they would be performed. Contextual learning provided trainees the opportunity to adapt skills and behaviors to particular persons and situations. It avoids the problems of generalization often associated with classroom based instruction, b) program management - the program management directed staff to net-work with other service providers and community resources in providing comprehensive services and trainees, and c) trainee characteristics - 3 key variables identified within this factor were: work motivation, support from the home or significant others, and work history. The identified success factors indicate that several service providers and relevant persons share the responsibility to assist disabled persons to achieve successful competitive employment. Human services agencies must work together from a broad base of multidisciplinary support to address the needs of disabled persons as they transition from sheltered and/or secondary school special education programs to competitive employment.

Stride, B. D. (1985). Computer vocations for severely physically disabled persons: Survey results. Archives of Physical Medical Rehabilitation, 66, 505-507.

This paper summarizes a number of surveys that were conducted to determine future employment opportunities in the area of computer Programming for persons with severe physical handicaps. Training programs and equipment were also evaluated to determine those most appropriate for persons with handicapping conditions. The author concluded that the outlook was not good for placements in computer programming. However, there may be opportunities for terminal operators. They also determined that IBM PC's were the most appropriate equipment to use.

Striefel, S., & Cadez, M. J. (1983). Developing, implementing, and evaluating functional individualized education programs. In S. Striefel & M. J. Cadez (Eds.)., Serving children and adolescents with developmental disabilities in the special education classroom (pp. 75-111). Baltimore: Paul H. Brookes.

IEP: "Program" means the IEP is a statement of what will be actively provided to the child, as opposed to "plan", which provides guidelines for proposed services. Discussion of P.L. 94-142, least restrictive environment, accountability, components of an IEP, the child study team, competencies required of CST member, responsibilities of the CST, developing an IEP, steps in completing an IEP, and evaluating & monitoring an IEP. Suggestions for conducting a quality check of IEP content: 3 factors must be evaluated to determine the quality of the content of written IEPs, (1) Degree of functionality that goals & objectives have for a given child, (2) Technical

adequacy of the goals & objectives, (3) Generality of goals & objectives for a given child. Functionality consists of 5 characteristics:

1. Is skill necessary to prepare child to function in daily or future environments?
2. Of the alternative skills available, will the skill allow the child to reach the desired level of functioning most efficiently?
3. Are skills, materials & tasks similar to those that will be encountered in child's environment?
4. Are criteria for mastery consistent with the standards that will be expected in the child's environment?
5. Is skill chronologically age-appropriate?

Technical adequacy consists of 3 characteristics:

1. Are the conditions under which the child will demonstrate the behavior specified?
2. Is the child's response clearly specified in behavioral terms — is it measurable?
3. Is the criteria for mastery specified?

Generality consists of 3 characteristics:

1. Does goal/obj. specify that behavior must occur in presence of persons other than the original trainer?
2. Other settings?
3. Across time? (e.g. different days or different times during same day).

Sutter, P., Mayeda, T., Call, T., Yanagi, G., & Yee, S. (1980). Comparison of successful and unsuccessful community-placed mentally retarded persons. American Journal of Mental Deficiency, 85, 262-267.

The purpose of this study was to compare the characteristics of a group of clients who had failed in community placement with those of a group of clients who had successfully remained in community care. Clients were compared on the basis of demographic variables, self-help and social skills, and on the manisfestation of specific kinds of maladaptive behavior. Discriminant function analysis identified a maladaptive behavior factor and sex to be significant discriminators between the two groups. Unsuccessful clients manifested a significantly high frequency of every maladaptive behavior assessed by the maladaptive variable. More males than females failed in community placement.

Swann, W. B., & Snyder, M. (1980). On translating beliefs into action: Theories of ability and their application in an instructional setting. Journal of Personality and Social Psychology, 38, 879-888.

In this study of 90 male undergrads, one person taught two others a card trick. Some of the teachers worked from a direct instruction perspective (extrinsic ability) and some from a natural development perspective (intrinsic ability). Extrinsic teachers confirmed and intrinsic dis-confirmed ability beliefs but both maintained their initial impression of the ability level of their students. The students recognized the teacher's feelings about their ability.

Szymanski, E. M., & Danek, M. M. (1985). School-to-work transition for students with disabilities: Historical, current, and conceptual issues. Rehabilitation Counseling Bulletin, 29(2), 81-89.

Tarr, R. F., & Lewis, J. P. (1977). 1974-76 Follow-up of the physically handicapped in Pennsylvania. University Park, PA: Pennsylvania State University, Institute for Research on Human Resources. (ERIC Document Reproduction Service No. ED 149 165)

The study was conducted to assist vocational education educators in planning programs for handicapped students by surveying physically handicapped vocational education graduates, parents, and employers. Sample: 502 (of 1317) graduates of Pennsylvania vocational educational institutions with a minimum IQ of 80. Instruments included: Education history form; employer survey; parent follow-up survey; Minnesota Satisfaction Survey; career survey. Major finding: 52% of handicapped vocational, 40.5% of handicapped academic, and 53.7% of nonhandicapped vocational training were not related to the first full time job.

Taylor, J. M., Tucker, J. A., & Galagan, J. E. (1986). The Luke S. class action suit: A lesson in system change. Exceptional Children, 52, 376-382.

As a result of the powerful sanctions built into the Luke S. consent decree, the State of Louisiana successfully implemented radically different assessment practices which mandated peripheral intervention, curriculum-based assessment, state-wide in-service training for assessment personnel, and direct classroom intervention on the part of assessment personnel. With these new practices in effect, long waiting lists for evaluation were eliminated, assessment personnel are able to more accurately and efficiently evaluate suspected handicapped children, and pupil appraisal support services are offered to nonhandicapped children experiencing learning or behavior problems in the classroom.

Thiel, G. W. (1981). Relationship of IQ, adaptive behavior, age, and environmental demand to community-placement success of mentally retarded adults. American Journal of Mental Deficiency, 86(2), 208-211.

This study was designed to examine the impact of placement setting characteristics on placement success. Independent variables were placement-setting demand, intelligence, adaptive behavior, and age of retarded subjects, while placement success served as a dependent variable. Subjects were divided into two groups, the successful and the unsuccessful, based upon whether or not they could remain in their placement for 12 months. The study found that age and IQ did not have significant influence on placement outcome. Staff training and attitudes, hours of client training, peer and parental support, and client/staff ratios were recommended for future study.

Thirty-Four CFR. (1984, October 1). Proposed rules. Federal Register, 49(191), 38658-38660.

These are the proposed regulations for implementation of P.L. 98-221, Rehabilitation Amendments of 1984.

Thomas, A. (1979). Learned helplessness and expectancy factors: Implications for research in learning disabilities. Review of Educational Research, 49(2), 208-221.

This article reviews research on learned helplessness, attributions, and attribution retraining. All three areas were seen to be relevant to working with learning disabled children and adults.

Thompson, T. J., Braam, S. J., & Furqua, W. (1982). Training and generalization of laundry skills: A multiple probe evaluation with handicapped persons. Journal of Applied Behavior Analysis, 15, 177-182.

An instructional procedure composed of a graded sequence of prompts and token reinforcement was used to train a complex chain of behaviors which included sorting, washing, and drying clothes. A multiple probe design with sequential instruction across seven major components of the laundering routine was used to demonstrate experimental control. Students were taught to launder clothing using machines located in their school and generalization was assessed later on machines located in the public laundromat. A comparison of students' laundry skills with those of normal peers indicated similar levels of proficiency. Follow-up probes demonstrated maintenance of laundry skills over a 10-month period.

Thorndyke, P. W., & Stasz, C. (1980). Individual differences in procedures for knowledge acquisition from maps. Cognitive Psychology, 12, 137-175.

Verbal protocols of experts' versus novices' strategies for acquiring knowledge from maps were compared. Those procedures that differentiated novices from experts were than taught to novices and their performance significantly increased. These procedures were: three techniques for learning spatial information (imagery, pattern encoding, and relation encoding), two techniques for using self-generated feedback (memory-directed sampling and evaluation), and a procedure for partitioning the map into sections.

Tiller, C. F. (1985). Annual report: Magic Valley Rehabilitation Services, Rehabilitation Department Inc. Unpublished Report. Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This report provides an overview of the Magic Valley Rehabilitation Services, Rehabilitation Department Inc. The Project is designed to train severely disabled persons to perform tasks required of an entry-level worker in the food processing industry, DOT Classification 529.686-041. Individuals acquiring sufficient work skills are employed and promoted to different jobs within the food processing industry. The seasonal nature of the food processing industry has presented obstacles to meeting placement goals. The PWI is currently attempting to expand job placement opportunities in other industries.

Tillery, W. L., & Carfioli, J. C. (1986). Frederick L.: A review of the litigation in context. Exceptional Children, 52, 367-375.

Frederick L. was identified as a learning disabled person in need of special education. Because the school district did not operate appropriate programs for students at or above grade 5, he was deprived of a program to meet his needs. The parents initiated a class action suit in the federal courts seeking an appropriate remedy. Throughout the course of litigation, the federal court has served a key role as mediator in effecting sweeping changes in programs for learning disabled students. These changes have provided for special education of the learning disabled from school entry to age 21 and include provisions for equal access to vocational training for exceptional persons.

Tindall, L. (1982, December). Vocational education and employment for learning disabled students. Paper presented at the American Vocational Association Convention, St. Louis, MO. (ERIC Document Reproduction Service No. ED 226 124)

A discussion of strategies and ideas for teaching learning disabled students in vocational education. A list was provided identifying 10 main tasks as

"having been successfully implemented at secondary or postsecondary institutions"; these tasks were later described in detail. Among these important tasks are: to find a bridge builder between special education and vocational education, to teach survival skills, and to teach transfer of skills.

Tobias, J. (1970). Vocational adjustment of young retarded adults.. Mental Retardation, 8(3), 13-16.

This is a follow-up survey of 1836 special education students who had graduated from New York City schools. They had been out of school for five to seven years. The data compiled from school records showed social, psychometric, and educational characteristics which were related to later vocational adjustment. 383 subjects were interviewed. 10% of males and 30% of females were employed during the week they were interviewed. Less than 40% of the interviewed sample and less than 20% of the entire population was known to DVR. White graduates used DVR services twice as frequently as black graduates. A majority of those identified as retarded by the schools were no longer recognized as retarded in situations where academic competence had little significance.

Toomey, J., & O'Callaghen, R. (1983a). Adult status of mildly retarded past-pupils from special education. Part I: Employment. International Journal of Rehabilitation Research, 6, 19-28.

The present study was carried out on a group of mildly retarded persons who graduated from special schools in Ireland between 1958 and 1978. The purpose of the study was to examine the current situation with regard to various aspects of employment and to explore the development of predictors in terms of personal characteristics and pre-work histories of subjects which might relate to subsequent success or failure. The results found that physical disability in addition to mild retardation in one third of the graduates indicates a sizable problem since it was found to relate significantly to a number of important aspects of employment status. The research findings also support the usual findings for mildly retarded adults that are for a majority to make satisfactory adjustment in employment. On the other hand, the rate of unemployment compares very unfavorable with the general population. This highlights the difficulties in finding employment experienced by mildly retarded persons.

Toomey, J., & O'Callaghan, R. (1983b). Adult status of mildly retarded past-pupils from special education. Part II: Social adaptation. International Journal of Rehabilitation Research, 6, 301-312.

This paper studies the post school adjustment of mildly mentally retarded past pupils in Ireland, and examines the variables related to social adaptation outside the work situation. This study provided evidence in support that a

majority of mildly retarded persons make satisfactory adjustment in adult life. There is sufficient evidence regarding the quality of marital relationships and child rearing capacity among the couples studied. Further follow-up will be necessary for more definitive statements on marriage rates, rates of handicap in offspring, and the achievement of independence in living arrangements.

Turnbull, H. R., III. (1986). Appropriate education and Rowley. Exceptional Children, 52, 347-352.

The Education of the Handicapped Act requires state and local educational agencies to provide a free, appropriate public education to all children with disabilities. The meaning of appropriate was left quite open-ended by Congress, which predicated appropriateness on compliance with state standards and a child's IEP. The Supreme Court's first special education case, Board v. Rowley (1982), clarified the meaning of appropriate-as did the Court's later decision in Irving I.S.D. v. Tatro (1984)-but raised questions about just how far the EHA requires schools to go in educating a child. This article analyzes Rowley's meaning for appropriate education and justifies the rightness of that decision in terms of its impact on the education of the child and the integration of children who have disabilities with children who do not.

Turner, J. (1983). Workshop society: Ethnographic observations in a work setting for retarded adults. In K. Kernan, M. Begab, & R. Edgerton (Eds.), Environments and behavior: The adaptation of mentally retarded persons (pp. 147-171). Baltimore, MD: University Park Press.

U.S. Department of Education, Office of Special Education and Rehabilitation Services. (1985). Continuation application for grants under Projects With Industry. Washington, DC: Department of Education.

This document provides an overview of the Project With Industry program. It gives a statement of general purpose, eligibility requirements for applicants, budget information, application procedures and a review of regulations.

U.S. General Accounting Office. (1981). Disparities still exist in who gets special education (GAO Publication No. IPE-81-1). Washington, DC: U.S. Government Printing Office.

This is a summary report that examines data from other studies in an attempt to evaluate the effectiveness of current efforts to provide education services to all children with handicapping conditions. The report concludes that over 4 million students were receiving special education services in 1980, or 8.6% of the school age population. The average child participating in special education programs is male, preadolescent and mildly retarded (13% severe, 36% moderate, and 51% mild). There is a disproportionate number of LD students in

special education, and minority students make up a disproportionate part of LD students. (41% of black students in special education in 1978 were LD, compared to 17% Hispanic and 10% Asian Americans. Almost 1/2 of the American Indians in special education are classified LD.) The report also discusses the factors that determines who gets special education.

U.S. Office of Personnel Management. (1982). Federal civilian workforce statistics. Affirmative employment statistics (Pamphlet No. CIG-82-71).

This is the first of a series of reports that replaces the Equal Employment Opportunities Statistics series last published in 1980. These reports review the Federal Government's progress in the implementation of affirmative action. Tables 4-7 in Appendix 1 refer to the status of employees with handicapping conditions. The report states that 124,381 persons with disabilities are employed by the Federal Government. This represents 6.9% of employee respondents. The Department of Education hired the largest proportion (8.9%). The Defense Department hires the most 66,083 (7.4%). The disability category Other Impairments, (diabetes under control and pulmonary or respiratory disorders) represents the largest proportion of employees, 43.2% or 53,724 workers. The category, Non-paralytic Orthopedic Impairments was second accounting for 26.6% of all workers with handicaps, (33,995 employees). Seventy-two percent or 90,225 employees with handicapping conditions are white collar, 27.4% or 34,130 are blue collar. A comparison of handicap and non-handicap employees by occupation is provided.

Vash, C. L. (1977). Sheltered industrial employment: Emerging issues in rehabilitation. Washington, DC: Institute for Research Utilization. (ERIC Document Reproduction Service No. ED 150 408)

This collection of reports is aimed at providing a state-of-the-art review of policy and practice in rehabilitation in Australia, China, Denmark, England, Israel, the Netherlands, Poland, Sweden, the United States, and West Germany. Topics covered include: segregated employment opportunities, employment rather than rehabilitation services, worldwide experience with mainstream employment, function of industrial collaboration in placement services, some prdiction of the future, and discussion of possibilities. Together, the papers and reports provide a solid base of comparative data for policy-makers and implementers.

Vitello, S. J. (1986). The Tatro case: Who gets what and why. Exceptional Children, 52, 353-356.

The second special education case decided by the U.S. Supreme Court, Irving Independent School District v. Tatro, is discussed. The case provides some criteria for determining which related services are required under the EHA. These criteria are discussed in relation to recent and future special education cases.

Vogal, S. A. (1986). Levels and patterns of intellectual functioning among LD students: Clinical and educational implications. Journal of Learning Disabilities, 19(2), 71-79.

The purpose of this study was to examine levels and patterns of intellectual functioning in 31 LD college females, 17-25. The goal was to provide descriptive data to assist colleges in identifying potentially successful LD college students and in providing needed support services. Mean Verbal and Performance IQ was within the average range and suprisingly even. The mean V-P IQ discrepancy was 10.6. The three highest mean scale scores were on Digit Symbols, Similarities, and Comprehensive subtests, while the three lowest were on Digit Span, Comprehension, and Arithmetic. Scatter on all subtests ranged from 5-13 (m=8) Scatter on the Verbal scale subtest was greater than on the Performance Scale subtest (m=6 & m=5.6 respectively.) The hierarchy of category scores was Verbal Conceptualization / spatial / sequential / ACID / acquired knowledge. The clinical and educational implications of these findings are discussed including possible sex-related and self-selection factors specific to this sample.

Vogelsberg, R. T. (1986). Competitive employment in Vermont. In F. R. Rusch (Ed.), Competitive employment issues and strategies (pp. 43-49). Baltimore, MD: Paul H. Brookes.

The author describes the development, history, service design, and location, as well as the successes and failures of the three oldest employment training programs in Vermont and draws conclusions. Employment training programs can direct their services to long-term follow-up and devlopment of better positions for those individuals already working in the community if several issues are resolved: (1) acceptance of community-based instruction at the public school level, (2) expansion of vocational education programs, and (3) initiation of multiple supportive options in the community.

Vogelsberg, R. T., Andarson, J., Berger, P., Hselden, T., Mitwell, S., Schmidt, C., Skowron, A., Ulett, D., & Wilcox, B. (1980). Programming for apartment living: A description and rationale for an independent living skills inventory. Journal of the Association of the Severely Handicapped, 5, 38-54.

This is a detailed description of a comprehensive Independent Living Skills Inventory, which includes: (1) a list of considerations for selecting and setting up an apartment; (2) a checklist of survival skills for the new living situation; (3) an inventory of necessary materials supplies for the apartment; and (4) a training model giving guidance in use of the inventory. Potentials and limitations were discussed.

Vogelsberg, R. T., Williams, W., & Friedl, M. (1980). Facilitating systems change for the severely handicapped: Secondary and adult services. Journal of the Association for the Severely Handicapped, 5(1), 73-85.

Secondary & adult service survey conducted in Vermont. In Secondary survey, training needs for EMR, TMR, & severely handicapped were:

(a) use of community services
(b) daily living skills
(c) work-related skills
(d) specific job/occupational skills
(e) academic preparation skills
(f) communication/language skills
(g) recreation/leisure time skills
(h) socialization skills
(i) emotional/personal adjustment skills

Major problem with transition is lack of cooperation/coordination with postschool programs, as well as availability of needed services.

Voss, J. F., Vesonder, G. T., & Spilich, G. J. (1980). Text generation and recall by high-knowledge and low-knowledge individuals. Journal of Verbal Learning and Verbal Behavior, 19, 651-667.

Effects of domain-specific knowledge on the products of subjects' writing efforts. Those with more knowledge provide more elaborate detail. Difference might be due to differences in abilities to represent problems.

Wacker, D. P., & Berg, W. K. (1983). Effects of picture prompts on the acquisition of complex vocational tasks by mentally retarded adolescents. Journal of Applied Behavior Analysis, 16, 417-433.

The effects of using picture prompts on the acquisition, generalization, and maintenance of complex vocational task were evaluated within a multiple baseline design across subjects and tasks. 5 moderately and severely mentally retarded adolescents were first trained to use picture prompts to guide their performance on one of more complex tasks. Following training, protesting with and without the picture prompts was conduced to evaluate the effects of training and to determine maintenance effects over a 2-4 week interval. Generalization of performance across tasks was assessed with 3 of the students who were provided novel tasks without training. Results: indicated that picture prompts can be successfully used to promote both acquisition and generalization of performance, and that subsequent training time on a novel task was reduced when the use of picture prompts had been previously trained.

Wacker, D. P., Berg, W. K., Bernice, P., & Swatta, P. (1985). Generalization and maintenance of complex skills by severely handicapped adolescents

following picture prompt training. Journal of Applied Behavior Analysis, 18, 329-336.

Three adolescents (13 to 19 years old) who were classified as severely retarded were trained, using a picture prompt package to complete three complex vocational or daily living tasks (cleaning, folding laundry, stuffing envelopes). Results indicated that all students required many training sessions to learn the first training task. Following initial training, all students generalized their use of the pictures across without additional training. The students also needed substantially reduced amounts of training on the remaining two tasks. During maintenance, two of the students continued to perform at relatively high levels of accuracy with and without the picture prompts, whereas one student continued to need pictures.

Walker, H., & Buckley, N. (1972). Programming generalization and maintenance of treatment effects across time and across settings. Journal of Applied Behavior Analysis, 5, 209-224.

Effects of three experimental and one control strategy were investigated in facilitating generalization and maintenance of treatment effects after two months in a token-economy classroom. At the conclusion of treatment, subjects were randomly assigned to one of three maintenance strategies or a control group and returned to their regular classrooms. The maintenance strategies were peer programming, equating stimulus conditions between the experimental and regular classrooms, and teacher training in behavior management techniques. The maintenance strategies were implemented in the regular classroom for a two-month period and then terminated. Results indicated a powerful treatment effect produced by the token economy. Behavior maintenance effects following treatment were also obtained.

Walker, H., & Hops, H. (1976). Use of normative peer data as a standard for evaluating classroom treatment effects. Journal of Applied Behavior Analysis, 9, 159-168.

This study illustrated the use of normative behavioral observation data as a standard for evaluating the practicality of treatment effects produced in other settings. Three groups of eight subjects each, displaying relatively low proportions of appropriate classroom behavior when regular classroom peers were selected for treatment within an experimental classroom setting. The three groups were exposed to intervention procedures designed to reinforce either direct academic performance and/or facilitative non-academic classroom responses. The treatment was effective in changing levels of appropriate behavior 1) above baseline levels in the experimental classroom, and 2) to within normal peer-defined limits when re-integrated into regular classroom. Further, the data reflect successful maintenance of these effects for a seven to 12 week follow-up period. Several applications of a normative model for

evaluating treatment, generalization, and maintenance effects were presented and discussed.

Walls, R. T., Zawlocki, R. J., & Dowler, D. L. (1986). Economic benefits as disincentives to competitive employment. In F. R. Rusch (Ed.), Competitive employment issues and strategies (pp. 317-329). Baltimore, MD: Paul H. Brookes.

The authors present theory and research related to work disincentives for persons with handicaps. The chapter contains an overview of specific disability benefits that may detract from employment-oriented efforts. Work disincentives discourage, check, or restain a person from seeking or engaging in productive employment. Regardless of severity of disability, vocational rehabilitation clients who are receiving SSI/SSDI benefits are placed in competitive employment less often than nonbeneficiaries. If remedial legislation, designed to reduce disincentives, compounds the existing confusion, it may only serve to further increase disincentives. Ambiguity and misunderstanding are major sources of work disincentives.

Ward, J., et al. (1976). Vocational preparation for the mildly retarded: An investigation into employment patterns and related factors. Paper presented at the Joint National Conference of the Australian Association for the Mentally Retarded and the Australian Group for the Scientific Study of Mental Deficiency, Canberra. (ERIC Document Reproduction Service No. ED 169 700)

This study, which attempted to identify patterns of employment of mildly mentally retarded youth in Australia, was based on a pilot survey of employment prospects, factors influencing employment of the mentally retarded, etc. Findings are reported in terms of social, educational, and vocational factors.

Warren, S. F., Baxter, D. K., Anderson, S. R., Marshall, A., & Baer, D. M. (1981). Generalization of question-asking by severely retarded individuals. Journal of the Association for the Severely Handicapped, 6, 15-22.

The generalization of a previously trained interrogative response ("what's that?") was investigated using eight severely retarded institutionalized individuals. Subjects had received comprehensive training on the appropriate use of the interrogative response for an average of 30 months before the analysis was instituted. Two of the eight subjects displayed generalization of the response during probe sessions when they were expected to ask, "what's that?," when a brown bag containing hidden reinforcers was displayed to them. Two of the remaining six subjects were able to re-establish the response when exposed to a peer modeling the behavior. The remaining four were given a brief review of the initial training program, and they were also able to re-establish the response. Results are discussed in terms of the relative ease

with which the generalization problem was remedied and the utility and necessity of generalization and maintenance programming with the severely and profoundly retarded.

Warrenfeltz, R., Kelly, W., Salzberg, C., Beegle, C., Levy, S., Adams, T., & Crouse, T. (1981). Social skills training of behavior disordered adolescents with self-monitoring to promote generalization to a vocational setting. Behavioral Disorders, 7, 18-27.

This study investigated the effects of a role-play and self-monitoring procedure on the generalization of vocationally pertinent social skills of behavior-disordered youth. Four emotionally disturbed adolescents served as subjects. Didactic instruction, provided in a classroom by a special education teacher, resulted in rapid acquisition of appropriate responses to a supervisor's instructions. There was no concomitant change in most students' interpersonal behavior with their work supervisor in the generalization setting. A subsequent intervention, in which students were subjected to role-play training and taught to use a self-monitoring procedure, produced generalized increases in the targeted social skill. In addition to the improvement in the students' responses to instructions, desirable collateral changes also were noted in their responses to critical feedback and to the conversational initiatives of the work supervisor. The use of a multiple baseline research design across pairs of students suggested that the generalized effects were a function of the intervention procedures. The separate effects of the role-play training and the self-monitoring procedures were not isolated in this study. However, it was proposed that the didactic and role-play training might have been responsible for the initial acquisition of the new interpersonal behavior, while the self-monitoring procedure seemed to be implicated in its generalization and maintenance.

Warring, D., Johnson, D. W., Maruyama, G., & Johnson, R. (1985). Impact of different types of cooperative learning on cross-ethnic and cross-sex relationships. Journal of Educational Psychology, 77, 53-59.

Two studies compared different levels of cooperation on cross-sex and cross-ethnic relationships. In one implementation study, 74 sixth-grade students were assigned to three conditions: cooperative controversy, cooperative debate, and individualistic learning. Few differences were found in cross-sex and cross-ethnic relationships between the cooperative controversy and cooperative debate conditions although both were mor positive than the individualistic learning condition. In the second study, 51 fourth-grade students were assigned to two conditions: intergroup cooperation and intergroup competition. Results indicated that cross-ethnic choices (structured, unstructured, out of class, and home) were significantly higher for intergroup cooperation than for competition. Cross-sex choices were higher but not significant.

Washington State Council on Vocational Education. (1984). Handbook on mainstreaming: Handicapped students in vocational education. Olympia, WA: Office of the Superintendent of Public Instruction.

The handbook is intended to assist educators as they serve students with handicapping conditions. It provides an overview of aspects of the vocational education process that need to be considered for successful job placement. The book includes definitions of handicapping conditions, list of adaptive equipment, and a resource guide of where to find it. It also provides models for effective program development.

Washington State Department of Labor. (1985). Work and disability: A comparison of 1970 and 1980 U.S. census data. LMI Review: Washington State Labor Market Information, 2-10.

This report concludes that the 1970 and 1980 data from the U.S. Census provide no evidence of closing the gap between disabled and non-disables with regards to employment. Data is provided for age, sex, race, standard of living and type of employment.

Washington State Department of Health and Social Services (1985). Assessment of current (1985) services in Washington State relative to federal supported employment criteria, 1-2.

This chart summarizes current supported employment efforts in Washington State. DSB and DDD efforts to provide services to those in need of supported work is constricted to the extended sheltered employment program, (ESE). During 1985, 473 individuals received services under ESE. However, only 130 of these individuals met Federal criteria for supported employment. The largest problem was a lack of integrated environment. Most people in need of supported employment are clients of DDD. DDD offered five programs, employment support, subsidized work, specific job training, community integration and the residential habilitation center. Brief discriptions of each program, and numbers of clients served are included. A narrative is provided that summaries services and identifies problem areas.

Watts, W. J., & Cushion, M. B. (1982). Enhancing self concept of LD adolescents: One approach. Academic Therapy, 18(1), 95-101.

The article summarizes and discusses four approaches for enhancing self esteem in LD students. The four approaches are compensatory intervention, vocational approach, basic skills remediation and peer tutoring.

Weatherman, R. F., Stevens, L. J., & Krantz, G. C. (1986). Passages to career: A framework for transition policy for mildly handicapped young

adults. Minneapolis: University of Minnesota, Department of Vocational and Technical Education and Department of Educational Psychology.

This project report provides several alternative definitions for transition and describes a number of characteristics or features of each. It discusses models of transition programming in relation to current practices. In addition, the authors present their own structure for transition programming and discuss policy development in relation to that structure. They provide several illustrations of issues related to transition policy and relate them to questions for future research.

Webb, N. M. (1980). An analysis of group interaction and mathematical errors in heterogeneous ability groups. British Journal of Educational Psychology, 50, 266-276.

This was an analysis of the interaction patterns of 66 students in an 11th grade math class. High-ability students did best in the individual condition, low-ability did best in the group, and medium did equally well in either. For high-ability, the group was detrimental to learning new material but advantageous for performance on previously learned material. For medium, the group was good for new material but not for previously learned and for the low-ability kids, the group was better for both. Asking and/or receiving help was associated with achievement.

Webb, N. M. (1980). A process-outcome analysis of learning in group and individual settings. Educational Psychologist, 15(2), 69-83.

This review and analysis paper examines the expectations for different kinds of work settings and characteristics of individuals involved in the setting. Specific attention is paid to ability and participation in the setting. Suggestions that personality variables may also affect participation are made.

Webb, N. M. (1982). Group composition, group interaction, and achievement in cooperative small groups. Journal of Educational Psychology, 74, 475-484.

This was a study of 96 junior high school students on a consumer math unit. Ability mix of the groups was found to relate to student interactions and achievement. Mixed ability groups with two levels of ability worked best. Three levels of ability in a group resulted in the loss for the middle ability subjects. Single ability groups did not work for low groups. Extroverted students worked better in groups than introverted.

Webb, N. M. (1982). Peer interaction and learning in cooperative small groups. Journal of Educational Psychology, 74, 642-655.

This was a study of 77 junior high school math students in which group composition and interactions were examined. Receiving no explanation or only a correct answer was negatively related to achievement while giving or receiving explanations was positively related. Medium ability students did better in uniform ability groups. Introverted students had higher achievement but less interaction than extroverted.

Webb, N. M. (1982). Student interaction and learning in small groups. Review of Educational Research, 52, 421-445.

This review of research examined the relationship between achievement and interaction in small groups, cognitive processes and social-emotional mechanisms in small group interactions, and characteristics of the group and individuals. The individual's role in group interaction is an important influence on achievement and the interactions can be predicted from multiple characteristics of the individual, group, and setting.

Webb, N. M. (1983). Predicting learning from student interactions: Defining the interaction variables. Educational Psychologist, 18(1), 33-41.

This is a review and integration of four studies on small group interaction. The results of the four studies suggest that giving or receiving explanations is beneficial for achievement but giving answers or pointing out errors is not related to achievement. Receiving answers or not getting help when asking was negatively related to achievement.

Webb, N. M. (1984). Sex differences in interaction and achievement in cooperative small groups. Journal of Educational Psychology, 76, 33-44.

In this study of math achievement and small group interactions of 77 junior high school students, boys and girls had equal achievement in sex balanced groups. However, when girls out numbered boys or when boys out numbered girls, boys' achievement was higher. When boys dominated, they ignored the girls and when girls dominated, they directed most of the attention to the boys.

Webb, N. M. (1984). Stability of small group interaction and achievement over time. Journal of Educational Psychology, 76, 211-224.

In this study of 110 students in a junior high school math class, giving and receiving explanations was related to achievement. The relationship of variables remained stable over time (three months), but student and group behavior tended to be unstable.

Webb, N. M. (1985). Student interaction and learning in small groups: A research summary. In R. Slavin, S. Sharan, S. Kagan, R. Hertz-Lazarowitz, C. Webb, & R. Schmuck (Eds.), Learning to cooperate, cooperating to learn (pp. 147-172). New York: Plenum Press.

This is a review of five studies by Webb and an integration of other research. Major conclusions include: 1) giving and/or receiving explanations is positively related to achievement while asking but not getting help is negatively related, 2)the highest highest relative member of the group gives the most explanations, 3) ability and sex composition of groups influences achievement, 4) stability of group interactions over time seems to be a function of continuous involvement between time one and time two, 5) individual personality characteristics are important.

Webb, N. M., & Cullian, L. K. (1983). Group interaction and achievement in small groups: Stability over time. American Educational Research Journal, 20, 411-423.

This study of 105 junior high school students in small group interactions in a math class showed that the nature of the interaction was a potent predictor of achievement. If a student asked for but didn't receive an answer was most detrimental to achievement. Group interactions tended to be stable over time, both in frequency and individual participation.

Webb, N. M., Shavelson, R. J., Shea, J., & Morello, E. (1981). Generalizability of general education development rating of jobs in the United States. Journal of Applied Psychology, 66(2), 186-192.

A study set up to examine the theory of generalizability. The theory was used to eaxmine the reliability of the U.S. Department of Labor's ratings of educational requirements od occupations. 71 field analysts located at 11 field centers used the General Educational Development (GED) scale to evaluate the reasoning, mathematics, and language requirements of 27 occupations on two occasions. Jobs were classified by length of the job description. The patterns of findings were consistent: Raters' ratings accounted for most of the error variation, occasions and centers accounted for little. The average of about 4 raters' ratings is needed to obtain a reliable measure of the threee components (generalizability coefficient exceeding .80). Only 1 occasion and 1 geographic center are needed.

Wehman, P. (1975). Behaviorial self-control with the mentally retarded. Journal of Applied Rehabilitation Counseling, 6, 27-34.

A discussion of behavioral self-control training with mentally handicapped persons. The author noted that self-control is a comparatively new area for educators and rehabilitation counselors. The author argued that the deficits and drawbacks associated with external control approaches demand inquiry into

exploring and expanding the potential strengths of clients' self-control. Suggestions for settings, strategies, and training methods were offered.

Wehman, P. (1975). Toward a social skills curriculum for developmentally disabled clients in vocational settings. Rehabilitation Literature, 36, 342-348.

The author proposes a curriculum of social skills necessary for successful vocational adjustment. The curriculum levels are: 1) personal care; 2) primary interaction; 3) job and community survival; and 4) advanced interaction. Developmentally disabled clients have a strong need for social skill development. Research needs to be directed toward skills in levels 3) and 4), which would include learning to use phones, fill out job applications, problem solving, developing a sense of humor, and a knowledge of whom to trust.

Wehman, P. (1981). Assessment of employability - An ecological approach. In P. Wehman (Ed.), Competitive employment new horizons for severely disabled individuals (pp. 17-43). Baltimore: Paul H. Brookes.

(1) Describe the following vocational assessment variable: proficiency, rate, endurance, quality, preservation. (2) Five major community survival skills can be identified for assessment: transportation & mobility, communication, self-care and appearance, socialization, functional reading and computation. (3) Parental assessment: parent behavior, parental attitude toward work etc. (4) Assessment of job requirements in the work environment: initial job analysis. (5) Evaluating the social & physical features of the work environment.

Wehman, P. (1986). Transition from school to adulthood for youth with severe handicaps. Focus on Exceptional Children, 18, 1-12.

Within the past decade, thousands of children labeled severely handicapped have received special education services financed through public funds. As these children leave school, forms of adult vocational and residential services take on great importance. The topic of transition is critically important to handicapped youth. Transition is described as a process involving school personnel and/or adult service providers. Five key aspects of transition planning are: 1) members of multiple disciplines must participate, 2) parental involvement essential, 3) planning must occur well before age 21, 4) process must be planned and systematic, and 5) vocational and residential service must be quality in nature. Factors influencing transition are listed: 1) sheltered workshops, 2) supported employment, 3) supported competitive employment, 4) enclaves in industry, and 5) mobile work crews. Residential support service options are presented. Experts in area of severely handicapped agree that a curriculum should be developed according to the following tenants: 1) must be locally referenced, 2) instruction must occur in community based settings, and 3) curriculum development must be viewed as a longitudinal or on going process begun early and built up on. The

use of the ecological analysis is stressed. The individualized transition plan, though possibly handled as part of the IEP, must be addressed separately, with a focus on the students independent adult life. Roles of persons involved in ITP design and implementation are discussed. A model ITP is included.

Wehman, P., Hill, J., Goodall, P., Cleveland, P., Brooke, V., & Pentecost, J. (1982). Job placement and follow-up of moderately and severely handicapped individuals after three years. Journal of the Association for the Severely Handicapped, 7, 5-16.

This follow-up study was conducted to learn if diagnosed "realistically unemployable" moderately and severely handicapped individuals can obtain and retain a job. The sample comprised 63 clients (average age, 30; most IQs in the 30-50 range). The primary handicap was mental retardation, and secondary diagnosis was physically handicapped or behaviorally disordered (five subjects were totally nonverbal). Placement of these individuals was primarily in utility work, e.g., cleaning. Most were paid minimum wage or better for at least 30 hours per week. The average client who worked for at least one year earned $4,464, which compares favorably with the average sheltered workshop, where workers earn $414 per year. After an analysis and discussion, the authors concluded that (1) moderately and severely handicapped individuals can be successfully employed in competitive settings, where it is not necessary to keep them on a sheltered workshop wage, and (2) cost effectiveness of the placement must be examined in terms of benefits derived from supplementing other expensive programs provided.

Wehman, P., Hill, M., Hill, J., Brooke, V., Pendleton, P., & Britt, C. (1985). Competitive employment for persons with mental retardation: A follow-up six years later. Mental Retardation, 23, 274-281.

This study was a longitudinal examination of the employment experiences of 53 mentally retarded adults in Virginia. The subjects (formerly in sheltered workshops) were participants in a supportive-competitive employment placement program. The data after 6 years indicated that supported competitive employment is a work model which provides several benefits. First, participants continued to be employed continuously, rather than dropping out of the work force after an initial job experience. Second, on the average, participants work longer in their entry-level positions than non-disabled workers in the same position. Third, the supported work model incurs less public expense than day programs available to the participants.

Wehman, P., & Kregel, J. (1985). A supported work approach to competitive employment of individuals with moderate and severe handicaps. Journal of the Association of the Severely Handicapped, 10(1), 3-11.

The authors present their supported work model of work training and placement, in which clients receive intensive, ongoing support throughout the length of their employment, including placement, job-site training, ongoing monitoring, and follow-up. The supported work model relies on a comprehensive approach to job placement that actively deals with nonwork related factors that often stand as barriers to employment. The authors conclude that major policy changes need to be made: (1) public policy commitments and clear financial inducements must be established to encourage placement of people with moderate and severe handicaps into competitive employment; (2) rehabilitation agency officials who designeate programs as vocational training and placement vendors for services should encourage or stimulate use of a supported work model; (3) more funds need to be directed to community-based adult service agencies for the development of vocational training programs closely linked to jobs in competitive employment; (4) personnel in community service programs must receive extensive training in job placement, job-site behavioral training, and follow-up strategies; and (5) demonstration programs need to be established for innovative community-based adult service programs that focus on employment.

Wehman, P., Kregel, J., & Barcus, T. (1985). From school to work: Vocational transition model for handicapped students. Exceptional Children, 52(1), 25-37.

This paper defines a model for meaningful transition for handicapped youth. The model consists of three stages: school instruction, planning for transition, and placement into meaningful employment. For meaningful employment, the authors present various alternatives possibly available for persons with all types of disabilities, namely: competitive employment, competitive employment with support, enclaves in industry, and specialized industrial training.

Wehman, P., Kregal, J., & Seyfarth, J. (1985). Employment outlook for young adults with mental retardation. Rehabilitation Counseling Bulletin, 29(2), 90-99.

The focus of this survey was employment of mentally retarded young adults. A 60-item questionnaire was sent to individuals who had been identified as mentally retarded by participating school districts. 440 questionnaires were sent to individuals so identified who left these school districts between 1979 and 1983. The return rate was 68% (300 responses). The sample was chosen from 4 different locations in Virginia: an inner-city setting, a suburban area, a suburban rural area, and a completely rural area with a high poverty level. Interviews were conducted with each respondent to the questionnaire.

Data were analyzed with the focus on employment and level of income, fringe benefits, transportation to work, job characteristics, assistance in finding jobs, services available, reasons for job termination, and the nature of school vocational programs. The unemployment was nearly 60%, with 75% earning less than $500 per month. The critical element of communication was found to be nearly nonexistent between school personnel and the adult services agencies; instead, the network of family and friends plays a major role in job location.

Wehman, P., Kregal, J., & Seyfarth, J. (1985). Transition from school to work for individuals with severe handicaps: A follow-up study. Journal of the Association for the Severely Handicapped, 10, 132-136.

The authors report the level and types of employment, types of services received, income earned, and other significant variables that reflect the employment status of young adults with severe handicaps in four areas of Virginia. Subjects were 117 transition age young adults with moderate, severe or profound mental retardation. A data collecting interview included variables related to employment level, wages earned, types of jobs, assistance available in job indentification, etc. The authors found that 78.6% were unemployed, 9.4% were employed in sheltered workshops, and 12.0% were employed either full or part time. 55.4% of those unemployed stated as their reason for unemployment that there were no jobs in the area. The data did not lend itself to specific conclusions but can be used as a baseline from which to assess services and programmatic improvements.

Wehman, P., & Melia, R. (1985). The job coach: Function in transitional and supported employment. American Rehabilitation, 11, 4-7.

This article describes the roles of a job coach in employment programs for persons transitioning from workshops, adult activity centers, nonprofit placement programs, and schools. The job coach provides:

-a service for rehabilitation counselors;
-a community-based person who works out of nonprofit placement programs;
-linkage between the rehabilitation counselor, the client, the parents, and the referring agency;
-a way to fill important gaps in employment services for severely disabled clients who risk losing their jobs;
-someone who is involved in day-to-day training.

Functions of the job coach:
-to help severely handicapped achieve competitive employment through individualized planning.
-to provide direct service.
-to serve as the advocate and primary job trainer.

-to accompany the client to job interviews, help fill out applications, communicates the client's abilities.
-to work side-by-side with the client, once hired.

As the demand grows for people performing such roles, major issues must be identified and resolved, such as training strategies, methods of listing and determining competencies. There will be increased need for supervision of job coaching.

Wehman, P., Schutz, R., Bates, P., Renzaglia, A., & Karan, O. (1978). Self-management programs with mentally retarded workers: Implications for developing independent vocational behavior. British Journal of Social and Clinical Psychology, 17, 51-74.

This is a report of three research studies designed to evaluate the effects on work production rates of external reinforcement, self-administered reinforcement, and self-determined reinforcement. The subject pool consisted of three mentally retarded workers in two sheltered workshops. Results were charted and discussed.

Welton, J. (1981). Individualized educational program evaluation model: Development and field study. San Jose, CA: Santa Clara County Superintendent of Schools/California State Department of Education, Sacramento Division of Special Education.

Study: 90 students from 9 school districts in Santa Clara County, California. Investigated assessment data, IEPs, & implemented programs. Data collectors used questionnaire, interview, observation, and review techniques. Results indicated that in the chain of events from assessment to objectives to IEP (services, materials, equipment) to implemented program (services, materials, equipment), the weakest link was between assessment & objectives.

White, W. J. (1985). Perspectives on the education and training of learning disabled adults. Learning Disabilities Quarterly, 8, 231-236.

Adults with learning disabilities often face significant obstacles in their efforts toward leading satisfying lives. In spite of increasing attention toward the education and training of the population of handicapped individuals, little information is available about model training programs, characteristics of the population, and directions for future research and programming. Among the primary conclusions and issues discussed are the present state of knowledge regarding vocational and social adjustment, post-secondary education options, effective program components, and suggestions for future research.

White, W. J., Alley, G. T., Deshler, D. D., Schumaker, J. B., Warner, M. M., & Clark, F. L. (1982). Are there learning disabilities after high school? Exceptional Children, 49, 273-274.

This study was designed to address the adult adjustment of both learning disabled and non-learning disabled young adults. Due to a large number of variables, (147), and small samples size, (47 LD & 59 NLD), the use of inferential statistics to test the differences between the groups became tenuous because of an inflated experiment wise error rate. The two groups differ little with respect to: most demographic variables; vocational adjustment or job satisfaction; community adjustment or contacts with the police (but more LD were convicted of a crime than NLD); and medical status (with the exception of the use of prescribed drugs). The groups seemed to differ on their social personal adjustment, or ability to make friends and take part in recreational, social, and community activities. LD young adults were less involved than NLD counterparts. They were also less satisfied with their education in junior and senior high school, than the NLD respondents.

Wieck, C. (1986, November). From research to policy. Paper presented at the Annual Conference of the Association for Persons with Severe Handicaps, San Francisco.

This presentation provided an overview of public policy, policy issues, and policy mechanisms. Issues related to severely handicapped persons were discussed regarding (a) information related policy, (b) financial measures, (c) regulatory and control measures, (d) service operation, and (e) policy-related functions. The presentation of data to policy makers was discussed at length.

Wilcox, B., & Bellamy, T. (1982). Design of high school programs for severely handicapped students (pp. 99-120). Baltimore: Paul Brookes.

Education for secondary-level severely handicapped students is moving toward (1) instruction of relevant skills (2) will occur in nontrained as well as trained settings, and (3) are acquired with maximum efficiency. These three trends combine to emphasize the importance of general case instruction.

Guidelines for general case programming
-Define the instructional universe.
-Define the range of relevant stimulus and response variation in the instructional universe.
-Select examples from the instructional universe for use in teaching and probe testing.
-Sequence teaching examples.
-Test with non-trained probe examples.
-conduct probes after the student has learned some or all of the teaching examples.

-use probe tests to obtain information, not to teach.
-identify error patterns and modify teaching examples to eliminate these error patterns.

Wilkonson, R. (1981). Everything you wanted to know about handicapped students (but were afraid to ask). (ERIC Document Reproduction No. ED 207 382)

Information for faculty members of the State University of New York, Buffalo, is presented to provide assistance accommodations for the handicapped student in the academic courses and programs. The primary objective of the university is to eliminate competitive disadvantages for the handicapped. A summary statement and excerpts from Section 504 of the Rehabilitation Act of 1973 are presented to clarify the responsibilities of universities. The university is not required nor encouraged to lower academic standards or alter degree requirements for handicapped students. However, depending on the handicapping condition, the university may be required to: extend the time allowed to earn a degree, substitute one elective course for another, modify teaching methods and examinations, and provide taped texts or other academic aids as may be necessary to permit the handicapped student full participation in a degree program. Universities need not provide these services if they are offered through other community rehabilitation resources. Teaching strategies for the faculty for the following conditions are examined: deaf and hearing-impaired, the less visibly handicapped students, the blind and visually impaired, and the mobility and externally impaired students. Specialized academic aids that are available from the Office of Services for the Handicapped at the University are defined, and organizations that serve as resources at the campus, local community, and national levels are identified in terms of name, address, telephone number, and contact persons.

Will, M. (1984). OSERS Programming for the transition of youth with disabilities: Bridges from school to working life. Washington, DC: Department of Education, Rehabilitation Services Administration.

This paper outlines the U.S. Department of Education, Office of Special Education and Rehabilitation Services policy on the transition of students with handicapping conditions from school to adult life. A measurable assumption of the paper is that successful transition relies on placement in competitive employment. Proper vocational training is a key component of this transition process.

Will, M. C. (1985). Statement on transition. American Rehabilitation, 8(3).

The author, parent of a handicapped child and a professional engaged in rehabilitation services and special education, maintained that transition for handicapped individuals from school to working life is an outcome-oriented process. She states that the concept of transition should include five

separate features: (1) all disabled individuals must be served; (2) employment is the outcome of successful transition; (3) transition encompasses high years and young adulthood; (4) transition requires coordination of all services; and (5) the quality of each service is addressed.

Williams, J. M. (1985). When the classroom computer talks, handicapped students listen. American School Board Journal, 172(3), 43-44.

This article discusses how talking computers have been effective in education programs for students with handicapping conditions such as blindness, visual impairments, and autism. The authors also list seven ways in which talking computers can be used to enhance learning. They can: 1) force students to take an active role in the learning process; 2) allow for individual instruction at the child learning level; 3) provide feedback and reinforcement; 4) opportunity for success because the program can be set at the individuals learning rate; 5) decreased frustration level because student are more comfortable performing for the machine than the teacher and the class; 6) motivation resulting from the use of high tech machinery; and 7) lighten the teachers work load by allowing the class to be better organized.

Williams, K., Harkins, S., & Latane, B. (1981). Identifiability as a deterrent to social loafing: Two cheering experiments. Journal of Personality and Social Psychology, 40, 303-311.

In these two experiments using undergrads as subjects, the experimental task was "cheering" and involved individual, pair, or groups of six. Social loafing emerged fro groups unless the person could be identified. The source of the identifier is probably important. If the identifier is seen as a meaningful person, social loafing is reduced.

Wimmer, D. (1981). Functional learning curricula in the secondary schools. Exceptional Children, 47, 610-616.

This paper addressed a major issue in transition: the conflict and lack of coordination between traditional mainstream secondary school curricula and the actual skills required of handicapped students in the workplace. The author argued that traditional curricula for handicapped students should be integrated appropriately with career education, special education, and volcational special education. A modal—the DoDDS-N system—was developed to explore the possibilities of such integration. A description of the modal and a discussion of the applicability of the model were presented.

Winn, J. S. (1985). Annual report: Project With Industry Hearing, Speech, and Deafness Center (unpublished report). Seattle, WA: U.S. Department of Education, Rehabilitation Services Administration, Region X.

This report details the activities of the Hearing, Speech and Deafness Center. This PWI provides job placement services to severely disabled rehabilitation clients with an emphasis on services to the hearing-impaired population. The nature of the handicapping condition impacts the cost of services and placement rates.

Wood, F. H., Johnson, J. L., & Jenkins, J. R. (1986). The Lora case: Nonbiased referral, assessment, and placement procedures. Exceptional Children, 52, 323-331.

Lora v. Board of Education of the City of New York, a suit filed to correct abuses in the identification and placement of Black and Hispanic students in segregated special day schools for students disabled by emotional disturbance, was decided by a consent decree agreement contained in a court order issued in 1984 following a 9-year history of testimony, decisions, appeals, consent orders, and judgments. Monitoring of the final order continues until 1986. An unusual aspect of the process in Lora was the appointment by the court from nominees suggested by the parties to the suit of a special advisory panel of experts on special education programming to provide advice and technical assistance regarding nonbiased assessment and placement procedures. This article describes the history and resolution of the Lora litigation, and standards and procedures intended to prevent future discriminatory practices or to detect them as soon as they occur put forward in the final order.

Wood, J., & Seyfarth, J. (1985). A study of teacher inservice training and changing teacher attitudes toward handicapped children (Research Summary, pp. 65-71). Fayetteville: University of Arkansas, Division of Education.

Recent studies have reported varied conclusions regarding the effects of in-service training on teachers' attitude change toward handicapped children. The authors argued that there is evidence that in-service training has a significantly positive effect on attitudes of teachers toward handicapped students. Their belief is based on findings of this evaluation of Project Adapt, which was designed to develop positive attitudes in regular teachers, and to promote their adaptation to curriculum. Ten recommendations were made to educators after a discussion of the findings.

Wuerch, B. B., & Voeltz, L. M. (1982). Appropriate leisure activities selection. In B. B. Wuerch & L. M. Voeltz (Eds.), Longitudinal leisure

skills for severely handicapped learners (pp. 115-125). Baltimore: Paul H. Brookes.

The leisure activities and their instructional objectives described in this chapter were selected and field tested using a problem-solving approach. By implementing this approach, a teacher can identify & select activities which are appropriate for his/her particular students & classroom curriculum component.

(1) Assessing the activity's appropriateness
Using the Leisure Activity Selection Checklist which includes these areas of concern: normalization, individualization, environmental.
(2) Assessing student interest: The Student Interest Inventory provides methods of obtaining information about the activity preferences of students.
(3) Assessing current leisure functioning. Two different assessment procedures can be applied to provide a teacher with this information:
(a) by conducting a discrepancy analysis;
(b) by baselining on a predetermined instructional sequence.
(4) Developing goals and objectives
Teachers must develop and select instructional goals & objectives appropriate for the student, in order to allow the student to play appropriately & independantly.

Wuerch, B. B., & Voeltz, L. M. (1982). Training for skill acquisition. In B. B. Wuerch & L. M. Voeltz (Eds.), Longitudinal leisure skills for severely handicapped learners (pp. 27-43). Baltimore: Paul H. Brookes.

This chapter provides the methodology for teaching severely handicapped students to appropriately use leisure activities.

(1) Free time & activity cues: Student must learn to recognize that free time is available and to indicate his/her activity preference.
(2) Shaping attending behavior (methods are discussed).
(3) Task analysis (component & methods are discussed).
(4) Teaching methods: Total task training/individual step training, Forward/backward training.
(5) Functional instructional cues are determined & given to students.
(6) Positive reinforcement. Methods & procedures for determining functional reinforcers.
(7) Correction of errors.
(8) Data collection.
(9) Skill maintenance.

Yager, S., Johnson, D. W., & Johnson, R. T. (1985). Oral discussion, group-to-individual transfer, and achievement in cooperative learning groups. Journal of Educational Psychology, 77(2), 60-66.

This study of 75 second-grade students compared daily achievement, post-instructional achievement, and retention in three conditions: cooperative structured oral discussion, cooperative unstructured oraldiscussion, and individualistic learning. Results indicated that the students in the structured oral cooperative condition scored higher on post-instructional tests and tests of retention than did students in the unstructured oral cooperative condition. Students in the cooperative conditions scored higher than those in the individualistic learning condition. As expected, students in the cooperative conditions scored higher accuracy rates for daily work: the structured oral discussion cooperative (93%), the unstructured oral discussion cooperative (87%), and the individualistic learning (61%).

Yager, S., Johnson, R. T., Johnson, D. W., & Snider, B. (1985). The effects of cooperative and individualistic learning experiences on positive and negative cross-handicap relationships. Contemporary Educational Psychology, 10, 127-138.

A study of two types of cooperative learning and individualistic conditions for 69 fourth grade kids, of whom, 15 were LD or BD (not defined). Overall, many of the attitude measures favored the coop condition but many of them were essentially implementation measures. Sociometric measures are not statistically analyzed. Data for handicapped are not separated in the presentation.

Yurchak, M. J. H., & Mathews, R. O. (1980). The Huron study of the quality of educational services provided the handicapped children from the perspective of the child, family, and school personnel (Final Report). Cambridge, MA: Document Resume, Huron Institute, Bureau of Education for the Handicapped.

This is an extensive study of the implementation of PL 94-142 and its impact on handicapped children. Twelve children of various handicapping conditions, family circumstances, and administrative experiences were studied. Three areas of mutual adjustment required by families and professionals were examined: referral and entry into special education programs; IEPs; and evaluation of first year services and transition to the second year. Four dimensions of the impact of PL 94-142 were discussed: relationship between parent and school, individualization, mainstreaming, and advocacy of children's rights. Implications of findings were presented.

Zaccaro, S. J. (1984). Social loafing: The role of task attractiveness. Personality and Social Psychology Bulletin, 10(1), 99-106.

This was a study of 158 undergrads in which they worked in two or four person groups on a paper folding task. Task attractiveness was manipulated. Social loafing occurred in low task attractiveness conditions but in high task attractiveness, four person groups out performed the two person groups.

Zittel, G. (1985). Handicapped youth prove their work-ability. Vocational Education Journal, 60(3), 36-37.

This article discussed a statewide job training/job placement program called Project Work-Ability, an interagency effort of educators, employment specialists and rehabilitation counselors in California. Twenty-five percent of the participants in 1982-83 were severely disabled, with problems ranging from autism to mental retardation to multiple handicaps. Work-Ability has broadened job training and placement services with the use of existing funding, funding the previously would not have been shared among the agencies. Not all programs or students succeeded, but more handicapped youth will be leaving high schools with genuine promises of a job or an advanced degree.

Zuckerman, D. (1984). Use of personal computing technology by deaf-blind individuals. Journal of Medical Systems, 8, 431-435.

This paper describes a system that enables deaf-blind people to work with microcomputers. The system utilizes the International Code, a general communication medium. The deaf-blind person hears Morse code via a vibrotactile device to see the computer's screen. This technique enables deaf-blind individuals to receive immediate feedback from their typing and to scan the screen. This makes it possible for them to use the keyboard and screen in the same way as do sighted persons. A side benefit is that it provides a means for deaf-blind people to communicate with the sighted through a common medium: The sighted person can see the screen while the deaf-blind person feels it. Hardware cost to equip a standard personal computer with this interface is negligible. Vibrotactile Morse code is particularly viable because it can be adapted for the individual's particular tactile sensitivities. Morse-encoded tactile communication fits well in a social facilitation context for learning. It is technologically simple and standard. This work can significantly improve the quality of life for deaf-blind individuals because it provides new opportunities for communication and vocations.